



FIRST ANNUAL REPORT

OF THE

TRUSTEES

OF THE

BOSTON STATE HOSPITAL,

FOR THE YEAR ENDING NOV. 30, 1909.



BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1910.

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OFFICERS

OF THE

BOSTON STATE HOSPITAL.

TRUSTEES.

WALTER CHANNING, M.D., <i>Chairman</i> ,	.	.	.	Brookline.
HENRY LEFAVOUR, <i>Secretary</i> ,	.	.	.	Boston.
Mrs. HENRIETTA S. LOWELL,	.	.	.	Brookline.
JOSEPH KOSHLAND,	.	.	.	Boston.
Mrs. KATHERINE G. DEVINE,	.	.	.	South Boston.
WILLIAM TAGGARD PIPER,	.	.	.	Cambridge.
MICHAEL J. JORDAN,	.	.	.	Dorchester.

Stated meetings of the trustees are held at the hospital on the second Tuesday of each month.

OFFICERS.

OWEN COPP, M.D.,	.	.	.	.	<i>Superintendent.</i>
WILLIAM NOYES, M.D.,	.	.	.	.	<i>Assistant Superintendent.</i>
SAMUEL W. CRITTENDEN, M.D.,	.	.	.	.	<i>Assistant Physician.</i>
GEORGE H. MAXFIELD, M.D.,	.	.	.	.	<i>Assistant Physician.</i>
MARY E. GILL, M.D.,	.	.	.	.	<i>Assistant Physician.</i>
ERMY C. NOBLE, M.D.,	.	.	.	.	<i>Assistant Physician.</i>
— — — — —,	.	.	.	.	<i>Assistant Physician.</i>
JANE ROBERTSON,	.	.	.	.	<i>Superintendent of Nurses.</i>
JESSIE M. BUIST,	.	.	.	.	<i>Assistant Superintendent of Nurses.</i>
FLORENCE N. SPIDLE,	.	.	.	.	<i>Matron.</i>
ARTHUR E. MORSE,	<i>Chief Engineer.</i>
LOUIS S. WHITE,	<i>Farmer.</i>

TREASURER AND STEWARD.

WILLIAM E. ELTON,	Dorchester.
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Office at the Women's Department, Dorchester Center.

VISITING COMMITTEES, 1909-10.

February,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
March,	.	.	.	.	Mr. LEFAVOUR and Mr. KOSHLAND.
April,	.	.	.	.	Mr. JORDAN and Mr. PIPER.
May,	.	.	.	.	Dr. CHANNING and Mr. KOSHLAND.
June,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
July,	.	.	.	.	Dr. CHANNING and Mr. PIPER.
August,	.	.	.	.	Mr. LEFAVOUR and Mrs. LOWELL.
September,	.	.	.	.	Mr. KOSHLAND and Mr. JORDAN.
October,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
November,	.	.	.	.	Mr. LEFAVOUR and Mr. PIPER.
December,	.	.	.	.	Mr. KOSHLAND and Mr. JORDAN.
January,	.	.	.	.	Dr. CHANNING and Mrs. DEVINE.

The Commonwealth of Massachusetts

TRUSTEES' REPORT.

To His Excellency the Governor and the Honorable Council.

The trustees of the Boston State Hospital have the honor to present herewith their first annual report.

PREVIOUS HISTORY OF THE HOSPITAL.

The Boston State Hospital, known until 1897 as the Boston Lunatic Hospital, was opened in 1839 in South Boston. In 1884, 84 patients were transferred to Austin Farm in Roxbury, which was organized independently under the name of the Retreat for the Insane. In 1889 the retreat was made a department of the hospital. In 1893 the first new building was occupied. In 1895 the new buildings were opened at Pierce Farm. In 1897 the name was changed to Boston Insane Hospital. In the beginning the departments were made independent units with separate superintendents. In 1898 these were consolidated under one superintendent, and the same year the names changed from Austin Farm to Department for Women, and from Pierce Farm to Department for Men. In 1904 the Stedman, Walker and Butler buildings were opened.

STATE CARE OF BOSTON'S INSANE.

Pursuant to the Acts of 1908, chapter 613, all of Boston's insane came under the care of the State. Section 1 of the chapter above referred to reads as follows: "The commonwealth, after the first day of December in the year nineteen hundred and eight, shall, by the officers and boards authorized thereto, have the care, control and treatment of all insane persons who are now cared for by the city of Boston, or by any board of officers thereof,

and the city of Boston shall not hereafter establish any asylum or other institution for the care of the insane, or after said date maintain any such institution, or be liable for the board, care, treatment or act of any insane person." Section 2 of the same chapter specifies in part that: "The institution or asylum in which such insane persons are cared for shall, after said date, be called the Boston State Hospital, and shall be subject to all laws, so far as they apply, governing state hospitals," and also that: "The government of said Boston State Hospital when established, shall be vested in a board of seven trustees." Section 3 gives the State Board of Insanity authority, "with the approval of the governor and council, in the name and on behalf of the commonwealth, to take, or acquire by purchase or otherwise, the lands and buildings now constituting the Boston insane hospital in the city of Boston, together with any lands or buildings adjacent thereto, which, in their opinion, may be necessary to accomplish the purpose of this act."

In accordance with section 2 of the act above quoted seven trustees were duly appointed by Governor Guild, as follows:—

For the term expiring on the first Wednesday of February, 1916,
Walter Channing of Brookline.

For the term expiring on the first Wednesday of February, 1915,
Henry Lefavour of Boston.

For the term expiring on the first Wednesday of February, 1914,
Henrietta S. Lowell of Brookline.

For the term expiring on the first Wednesday of February, 1913,
Joseph Koshland of Boston.

For the term expiring on the first Wednesday of February, 1912,
Katherine G. Devine of Boston.

For the term expiring on the first Wednesday of February, 1911,
George H. Leonard of Boston.

For the term expiring on the first Wednesday of February, 1910,
Michael J. Jordan of Boston.

FIRST MEETING OF THE TRUSTEES.

A call was issued by the first-named of the above for the trustees to meet at the hospital on December 1, and all the members of the Board were present. Dr. Channing was elected chairman, and Mr. Lefavour secretary. It was voted that all officials occupying positions in the Boston Insane Hospital up

to Dec. 1, 1908, be temporarily appointed to the same positions in the Boston State Hospital, and that the superintendent be appointed temporary treasurer. A committee was appointed to prepare by-laws.

The superintendent reported that the number of patients in the hospital December 1 was 748, — 306 of these being men and 442 women; number on visit, 115, — 34 men and 81 women. Total carried on the books, 863, — 340 men and 523 women.

Prior to the meeting, the men's department, at which the meeting was held, was inspected by the Board. Since this time many inspections have been made of both the men's and women's departments of the hospital by the Board as a whole, by the visiting committees and by the individual members.

THE CONDITION OF THE HOSPITAL.

This hospital, unlike any other in the State, is, to all intents and purposes, two separate institutions. It will be remembered that the ordinary plan is to have an administration building with wings running out from it, one for each sex, making a very compact and easy set of buildings to administer. In the Boston State Hospital the men's department is about half a mile from the women's, and separated by broad fields and swamps, some of which, until recently, did not belong to the State. A much-travelled road also intervenes.

As a consequence of this wide separation it is necessary to have two heating and lighting plants, requiring a much larger consumption of coal than in an ordinary institution of the same size. There are two halls, used both for religious services and amusements, duplicate offices for the superintendent and assistants, two kitchens, two carpenter shops, duplicate storerooms and refrigerators, duplicate stables for horses, and other duplicate arrangements. There is one bakery and one laundry, both outgrown and inadequate.

The effort is made to carry on the two departments as a unit, but the great distance referred to, and the necessity of maintaining so many duplicate arrangements, materially increases the cost of maintenance. Many things which might be done in the way of treatment and care of the patients and the administration of details are very difficult.

The trustees found that the buildings themselves presented quite a variety of conditions, as they were erected at different times and after different plans. The first ones, of wood, are now used only for administration purposes and a nurses' home. The buildings erected in the 90's for the women's department are of stucco and wood. They are slightly in appearance, but, from the nature of the construction, somewhat out of repair. The same is true of the buildings in the men's department, erected at the same time; though, on the whole, their condition is not quite as good as the other buildings. Owing to the economic conditions prevailing under a city government, the hospital was often unable to obtain sufficient appropriations for improvements and repairs desirable from year to year, and hence some of the things which, no doubt, the former trustees would have been glad to do had not been undertaken.

The most recent buildings, called the Stedman, Walker and Butler, after the names of former superintendents, were opened in 1904. These are all thoroughly well-constructed, fire-proof buildings, and were found to require little in the way of repairs.

Facilities for the administration of the hospital and the medical care of patients were not quite equal to those of the State hospitals, though an effort has been made to meet some of these requirements. A room in the basement of one of the new buildings, designed for a hydrotherapy department, had never been finished, so that it was impossible to do anything for the patients with that method of treatment. Another room had been partly finished for a laboratory, but never completed. In the men's department there were no arrangements for hydrotherapy, electricity or laboratory work, and very little scientific work was being carried on in either department.

It was found that the buildings erected in the 90's, while attractive externally, were in many ways very badly planned internally. Some of the wards were dark, poorly ventilated and unattractive. Much room was wasted in corridors. The living rooms in the buildings for the male patients were badly cut up by enormous chimneys in the center, taking away very materially from the space, and making it difficult for the attendants to look after their patients.

PLANS FOR THE DEVELOPMENT OF THE HOSPITAL.

After many careful examinations of the hospital, the trustees came to the conclusion that alterations in the buildings would be necessary, as well as a reorganization of the general and medical administration, to bring it up to the standard of other State hospitals. Even then, however, the difficulties of administration and the great expense attendant on so many duplications would not be overcome, and neither would the constantly increasing demand for accommodations be met. To unify, as far as possible, the management of the two departments, and to provide adequate provision for patients, it would be necessary to add more buildings.

While a general policy for the development of the hospital was being considered, it became evident that to have it take tangible form some one should be appointed to take charge of the hospital who had had special experience and training as an administrator, and who would be able to work out definite plans, and, if possible, carry them forward to completion. In looking over the field for a man of the kind required, the attention of the Board was directed to Dr. Owen Copp, who had for ten years been the executive officer of the State Board of Insanity. In conjunction with that Board, he had, during this long period, been gradually developing a broad scheme of hospital provision and organization for the entire State, and largely to him was due the progress that had been made in the care of the insane. It was felt by the trustees that his great familiarity with the whole problem, and especially with the specific needs of the Boston State Hospital, would make him eminently fitted to assume charge of the hospital at this critical period in its history, and they therefore voted to ask him to become superintendent.

Unfortunately, the State Board of Insanity did not feel that they could part with him, as the plans which they had in mind were not yet completed, and they were depending on his co-operation to carry them out. They were willing, however, that he should temporarily devote half his time to the affairs of the hospital. While the trustees regretted that they could not have the whole of it, they felt that it was for the benefit of the hospital that they should take half. Accordingly, he was duly elected

superintendent, and Dr. Noyes, who had acted in that capacity up to this time, was made assistant superintendent.

Since the appointment of Dr. Copp much time has been spent in working out plans for the future development of the hospital. To accomplish the desired results the plans advocated by the State Board of Insanity seem the best; that is, to make the Boston State Hospital into a large institution, to accommodate most of the insane from Boston and near-by towns, which might be called the metropolitan district. It will be remembered that the State Board recommended, for the carrying out of their plans, a hospital to care for acute cases in the city proper near the medical schools; a custodial department which should be located on the site of the present hospital, the present buildings, of course, forming a part of this whole department; a sanitarium for convalescents at some convenient point in the country, and a colony for incurable cases, also not far removed.

According to the special report made to the Legislature by the State Board of Insanity, May, 1908, the so-called metropolitan district has a population of about 1,200,000, or 40 per cent. of the inhabitants of the State. It furnishes easily 1,300 commitments, or 46 per cent. of all. About 4,800 belong to this district. Less than 15 per cent. of the insane resident in the metropolitan district can be cared for in the Boston Insane Hospital. Nearly three times as many are committed to the other State hospitals. "The claims of the metropolitan district," the report stated, "now assume paramount importance and press for immediate attention. A metropolitan institution for at least 2,000 patients should be established according to the general scheme outlined."

As a matter of fact, the first steps have already been taken along these lines. Owing to the efforts of the State Board and others, the Legislature in June, 1909, appropriated \$600,000 for the purpose of erecting a hospital, for the observation and first care of acute cases of mental disease, in the city proper. In the act appropriating this money it was provided that this institution should be under the management of the trustees of the Boston State Hospital. Further legislation also was enacted that the State Board of Insanity should be authorized to take, by eminent domain, such land as, in its opinion, might be neces-

sary to provide adequately for the necessary enlargement of the hospital, and such takings have been made of all the land not owned by the State, bounded by Austin, Harvard, Canterbury and Walkhill streets, so that a total area of over 232 acres is now the property of the Commonwealth. This large tract of land will provide for the expansion of the institution to the extent that will ultimately be required.

The next step, and one which should be taken the coming year, in the opinion of the trustees, and which, it is hoped, will meet with the approval of the Legislature, is to add an infirmary group of buildings for both men and women, to accommodate 300 patients, and the necessary officers and nurses, at a cost of \$275,000. It will be seen that the erection of such buildings is in harmony with the general plan above outlined, but, further than that, it is of importance for the purpose of making the present hospital buildings of greater service, as a more thorough classification of patients can be made both as to mental condition and sex, and administration simplified.

As a part of the plan for further buildings at the hospital, it is highly desirable that the facilities for both medical treatment and service should be materially improved upon. With this idea in view it is planned to erect an addition to the Butler, which will serve as a treatment building, with baths of various kinds, apparatus for electrical and other treatment, and rooms for patients requiring constant medical supervision; also an extensive addition to the laundry, ultimately to be used only for laundry purposes, but which will for the present, while partially used as a laundry, provide shops for the carpenters and steam fitters, and industrial rooms for the patients. This is a much-needed addition, which it is hoped can be made the coming year. It may be stated here that the carpenter and paint shops are in the basements of the buildings occupied by patients, an arrangement which is regarded as hazardous, and does not exist in other State hospitals. These shops have been fireproofed for temporary use.

When the plans outlined above for the infirmary group have been carried out, the hospital will be in condition to care for several hundred more patients, and give them such medical treatment as they require. It will also be possible to do some

scientific work in the institution itself. Of course, the center of the higher laboratory and research work will be at the hospital for the first treatment of acute cases in the city proper, but some such work can always be carried on with profit by the assistants in this department.

The trustees and superintendent have spent much time, not only upon the plans for the proposed infirmary group, but also upon the further development of the institution along the lines recommended by the Board of Insanity, to provide for the care of the large number of patients, probably not less than 3,000, which in the future it may be expected the State will be called on to furnish accommodations for on the present hospital grounds. In conjunction with a landscape architect, the superintendent has studied the contour of the entire property, and rough plans have been made for the grouping of different classes of patients at different points. Eventually, the present wooden buildings used for administration purposes and nurses' home, which are not only inadequate in many respects but dangerous on account of fire, and the stables and the cow barn, and other outbuildings which also are of wood, and unsanitary and outgrown, should be pulled down.

Buildings will be required for the reception of acute cases as they come from the department in the city proper, and to some extent, no doubt, from other sources. Further provision for custodial cases will be necessary, as well as added infirmary buildings. There will be a considerable number of patients who can be usefully employed. These will be provided for together in industrial groups. On another part of the grounds, where the farm buildings are to be placed, will be located what may be called the farmstead group. Each one of these groups can be enlarged as rapidly as circumstances may demand.

The lay of the land admirably adapts itself to a plan of this kind. The different groups can be entirely separate from each other, yet near enough to make administration comparatively easy. There is excellent land for garden and farming purposes, which will furnish occupation for a large number of patients.

To carry out these plans will, of course, be the work of years, but the trustees feel that no group of buildings should be erected without considering its relation to the other groups which will be necessary in the future.

HOSPITAL FOR THE FIRST CARE AND OBSERVATION OF ACUTE CASES.

The trustees, having been authorized to buy land and erect a hospital for acute cases in the city proper, devoted much time to looking about for an available site. It was considered desirable to have this as near as possible to the medical schools, as it should be accessible not only to those engaged in teaching nervous and mental diseases but to students and others engaged in special research work. After a search of some months, and the consideration of many sites, the Board finally decided upon what is called the MacDonald lot, situated at the corner of the Parkway, Brookline Avenue, Fenwood Road and Vila Street, comprising about 90,000 square feet. After having been approved by the Governor and Council and the State Board of Insanity, this lot was purchased.

Preliminary studies of the buildings will be undertaken as soon as possible. This work will be somewhat simplified from the fact that the Board of Insanity, a year ago, had made sketch plans for the same purpose, which, however, at the time, could not be utilized.

INTERNAL ADMINISTRATION.

Attention has been paid to matters of internal administration. It seemed proper that the steward, Mr. William E. Elton, who had direct charge of the purchase and use of supplies and other business matters, should also act as treasurer, and he was accordingly appointed to that position.

A finance committee was appointed under the by-laws, which has taken up many matters of business administration with the superintendent, and various modifications have been made. The system of accounting was changed from the one formerly used to that employed for the State institutions, which meant considerable hard work on the part of employees in the business office. It may be said here that the business affairs of the hospital were in excellent condition when the trustees took charge, purchases being made on a careful system.

In March there was a most unfortunate occurrence in the death of a violent parietic from internal injuries. On investigation these were found to be partly due to maltreatment by two

attendants. They were arrested, and after a vigorous prosecution by the district attorney found guilty. One was sentenced to the house of correction for three years, and the other for a year and a half.

The death of this patient led to an immediate investigation by the trustees of the medical care and treatment of patients. It was found that, owing to the amount of business and office work that the medical officers in the men's department were obliged to attend to, they had little time to make visits in the wards, and often the number of attendants was too small to care for the patients. The trustees felt that more time should be spent in the wards in the men's department, and that there should be a more thorough supervision of the work of the attendants.

On the recommendation of the superintendent, Dr. E. C. Noble was appointed as an additional assistant in the men's department, and arrangements made to allow the physicians to devote more attention than heretofore to ward duties. In the women's department, where the number of assistants was larger, the patients were receiving careful medical attention, but the standard of nursing was not as good as it should be, and there were not enough nurses.

Some time was spent in revising the schedule of salaries to harmonize with those in other State hospitals, with the idea that if the nurses were paid better wages it would be possible to get better ones, and to keep them for longer periods. Since this schedule went into effect there have been many more applications received, and the quality of the nursing staff has been gradually improving. Earnest efforts will be made in the future to provide more amusements and occupations for the patients, and make the wards more cheerful and attractive by adding furniture, pictures, plants and other things suggestive of home surroundings.

DIPHThERIA EPIDEMIC.

During the year there have been, from time to time, sporadic cases of diphtheria. In May and June the number of cases increased, and at the women's department developed into an epidemic. It was necessary to set aside a ward for the purpose of isolation, and Dr. Mary E. Gill was put in charge. For several months a large number of nurses and patients were sep-

arated from the others. A few of the employees were sent to the south department of the city hospital. Dr. Southard, the pathologist employed by the State Board of Insanity to supervise the pathological work in all of the State insane hospitals, was requested to make a careful investigation of the epidemic. He, in conjunction with an assistant, is now conducting research work which it will take some months to complete, and which, it is hoped, will throw some light on the nature of such epidemics.

A second epidemic, lasting, however, only a short time, occurred in October, most of the cases being in the men's department. An old farmhouse, called the Fottler house, which for some years had been used as a sleeping place for patients working on the farm, was vacated and made into a contagious department, and several patients at once were sent to it. Fortunately, this second epidemic lasted only a few days, and up to the time of writing this report there has been no fresh outbreak. Much praise is due Dr. Gill, who for several months was isolated on the ward with the diphtheria patients.

REPAIRS AND IMPROVEMENTS.

One of the first things called to the attention of the trustees was the need of fire escapes upon one of the buildings in the men's and one in the women's department. As soon as possible these were provided, and in case of fire will make egress more easy than before. Painting has been carried on on a large scale, both on the inside and outside of many of the buildings, greatly to their improvement. Some of this work was done by the employees of the hospital and some by contract. At the women's department there were many old board walks in a badly dilapidated condition. Some of these have been taken up and replaced by granolithic walks, which will make outdoor exercise in the winter months more comfortable for the patients. Some granolithic floors have also been laid in the men's department. A large amount of piping used for heating purposes has been removed, as it served no useful purpose. In this way a considerable saving in fuel has been made. A new bath room has been put in in the nurses' home. An inexpensive solarium has been built by glassing in an open passageway between Stedman and Walker. A determined fight was made against gypsy moths and

other pests, which had done great damage to the trees. These are now in fairly good condition, but much work remains to be done the coming year. New furniture has been bought for some of the wards, which should be largely added to the coming year.

ESTIMATE OF EXPENSES FOR 1910.

The estimate of maintenance for the coming year has been placed at \$213,550. This is an increase of \$21,550 over the previous year. This is largely accounted for by the necessity of placing the nurses on a sixty-hour basis, in accordance with the plan pursued at some of the other State hospitals. To bring this about, 25 more nurses must be employed. Very little additional has been asked for for other purposes. One large item, for which too small an estimate was made last year, was the cost of water. As a city institution the hospital had received its water from the city without the cost appearing in the hospital accounts. When the State took over the institution it at once began to pay to the city the usual water rates for large consumers, amounting in the year to \$4,687, which makes an additional item of about \$2,000 of expense over what was anticipated. A more detailed analysis of estimates will be found in the report of the superintendent.

Summary of Appropriations.

For maintenance,	\$213,550 00
For an addition to the Butler building, for the treatment of acute cases,	39,000 00
For the construction and equipment of three infirmary buildings, to accommodate 300 patients and the necessary officers and nurses,	275,000 00
For the construction and equipment of an extension to the present laundry, to be used temporarily for carpenter and machine shops, and industrial rooms for patients,	44,000 00

DEATH OF A MEMBER OF THE BOARD.

Early in the year the trustees were saddened by the loss of Mr. George H. Leonard, who died on February 10. They held a special meeting and attended the funeral in a body. At the March meeting the following resolutions were adopted:—

The trustees of the Boston State Hospital desire to place on record their sense of great loss in the death of their honored associate, Mr. George Henry Leonard. Although the Board had been in existence for only a short period, and the official reign of its members had been brief, the trustees had come to hold a high appreciation of Mr. Leonard's qualities and careful judgment, his loyal devotion to duty and his willingness to give generously of his time and thought, and they had anticipated with satisfaction his most valuable service in the solution of the problems and discharge of the duties imposed upon the Board.

The trustees beg to extend to the family of Mr. Leonard their profound sympathy.

The place of Mr. Leonard on the Board was filled by the appointment of Mr. William Taggard Piper of Cambridge for the unexpired term.

CHANGES IN THE MEDICAL STAFF.

The appointment of Dr. Copp and Dr. Noble have been already referred to. At the October meeting of the Board a letter of resignation from Dr. F. X. Corr, assistant physician in the women's department, to take effect November 1, was read and accepted. At the November meeting a letter of resignation from Dr. William Noyes, to take effect January 1, was read and accepted. A resolution was adopted expressing the personal esteem of the trustees for Dr. Noyes, and their appreciation of his long years of faithful service to the hospital.

The reports of the superintendent and treasurer are appended.

Respectfully submitted,

WALTER CHANNING,
HENRY LEFAVOUR,
HENRIETTA S. LOWELL,
JOSEPH KOSHLAND,
KATHERINE G. DEVINE,
WILLIAM TAGGARD PIPER,
MICHAEL J. JORDAN,

Trustees.

SUPERINTENDENT'S REPORT.

To the Trustees of the Boston State Hospital.

The first annual report of the superintendent is respectfully submitted for the year ending Nov. 30, 1909, except the general statistics prescribed by the State Board of Insanity for the year ending September 30.

There were 814 patients in the hospital at the beginning of the statistical year, 449 were admitted, 341 were dismissed, and 132 died, leaving 790 at the close of the year.

The daily average number of patients was 769.85, of whom 671.62 were State charges and 98.23 private patients; 1,173 different patients were in the hospital during the year.

There were 73 emergency cases, of which 67 were committed and 6 discharged within the five days' limit.

One voluntary patient was received who was not insane and did not require commitment.

Exclusive of transfers and returns from visits, 335 patients were received, of whom 299 were admitted for the first time, 25 for the second time, and 11 for the third to fifth time.

The first cases of insanity numbered 274, of whom 39.78 per cent. were born in Massachusetts and 51.09 per cent. in the United States; 12.04 per cent. of the mothers were born in Massachusetts and 21.53 per cent. in the United States; 9.85 per cent. of the fathers were born in Massachusetts and 21.53 per cent. in the United States.

The average age on admission of cases first admitted to any hospital was 45.84 years; 22.62 per cent. were aged 60 years or more.

The chief causes of insanity were senility in 18.25 per cent., intemperance in 9.49 per cent., apoplexy and other organic lesions in 10 per cent., congenital in 3.65 per cent.

The duration of mental disease before admission to the hospital averaged 16.32 months. It was six months or less in

47.44 per cent., corresponding closely with the average percentage for the State.

Manic-depressive insanity and other curable forms constituted 33 per cent. of the first cases of insanity admitted; dementia præcox, 10.5 per cent.; alcoholic and organic dementias, 13 per cent.; senile dementia, 17.5 per cent.; general paralysis, 14 per cent.; paranoia, epilepsy and imbecility, 7.6 per cent. It thus appears that hardly more than one-third of the first cases of insanity had a chance of recovery at the time of admission to the hospital.

The discharges, exclusive of 90 transfers, numbered 184, of which 54 were recoveries, being 16.12 per cent. of commitments. In addition, 21 patients were discharged capable of self-support. Together they totalled 75, being 22.40 per cent. of commitments, against a percentage of 22.46 for the State last year. This represents the proportion of the insane restored to self-support in the community.

There were 132 deaths, 11.25 per cent. of the whole number of patients under treatment, against a five years' average percentage of 9.01 for the six State hospitals. Death resulted from pulmonary tuberculosis in 11, or 8.33 per cent., comparing with a four years' average percentage of 8.85 in the six State hospitals; from general paralysis in 36, or 27.2 per cent., comparing with such four years' average percentage of 17.44; from senile insanity in 41, or 31.06 per cent., comparing with such four years' average percentage of 31.18; from coarse organic brain lesions in 17, or 12.88 per cent., comparing with such four years' average percentage of 11.54. Curable forms of mental disease affected 25, or 18.94 per cent., comparing with such four years' average percentage of 11.37. Death occurred within three months after admission in 46, or 34.84 per cent., comparing with last year's percentage of 29.39 for the six State hospitals.

DIPHThERIA.

The general health throughout the hospital has been good aside from an epidemic of diphtheria.

Early in February a woman nurse contracted the disease while absent from the hospital on a visit to a sick friend, with-

out knowing the nature of her illness. Within the next three months five nurses came down with the disease and were treated in the South department of the Boston City Hospital.

Late in May it seemed wise to quarantine the hospital against the admission of new patients and the visits of friends, and to take cultures from every person in the women's department, in addition to the isolation of persons affected and thorough disinfection of rooms, bedding, clothing, etc., which had been done in every case. Those furnishing positive cultures were isolated in the two upper Stedman wards. Such systematic culturing and isolation were repeated twice at intervals of a few weeks. In all, 2,325 cultures were made, 160 persons isolated, and released only after yielding three consecutive and negative cultures. There were clinical symptoms in only 25 cases, 18 nurses and employees and 7 patients, the other 135 presenting no evidence of the disease other than the presence of the bacilli diphtheriæ in the nose or throat. When the last case had been released, on August 24, each ward was vacated and thoroughly disinfected with formaldehyde. No new cases developed during August and September, but from October 1 to 5 there was a sharp incidence of 18 clinical cases, 13 in the women's department and 5 in the men's department. No case, however, has since appeared. In both departments there were 31 clinical cases, 22 nurses and employees and 9 patients. There were no deaths, but temporary paralysis protracted the convalescence of two and serious affection of the internal ear impaired the hearing of another. Twelve cases were treated in the Boston City Hospital. Dr. Gill courageously assumed treatment of the women patients isolated in the Stedman wards, and deserves our grateful appreciation of her faithful service during three very trying months. We are also greatly indebted to Dr. Francis H. Slack and Dr. Burditt L. Arms, of the Boston board of health laboratory, for making the necessary bacteriological examinations from so many cultures.

At the suggestion of Dr. E. E. Southard, pathologist to the State Board of Insanity, advantage has been taken of the excellent opportunity afforded for the investigation of certain aspects of the epidemiology of diphtheria which could best be

worked out in an institution. Under his direction, Dr. Mary Elizabeth Morse has carried it on during the past six months, and will continue it to completion, probably within the next half year, when a full report will be made and published.

THE TRAINING SCHOOL FOR NURSES

has been conducted along the usual lines. Diplomas were awarded at the completion of the two years' course to 8 graduates. Since its organization, ten years ago, 64 nurses have been graduated, of whom 20 are still in the service of the hospital. The whole corps of nurses and attendants numbers 102, of whom 65 are women and 37 men. In the women's department 20 are graduate nurses, 18 pupils or probationers in the school. The remaining 27 women attendants and all the men attendants have not received systematic instruction as to their duties or nursing; in other words, no adequate effort is being made to train about 63 per cent. of our nursing staff. While it has been found impracticable in this hospital, as in most other public institutions, to exclude all who may be unwilling to follow a prescribed course of study, extending over a period of two years, it would be desirable and reasonable to expect all during the continuance of their service to listen to the teaching and participate in ward demonstrations, with reference especially to the more practical aspects of their duties. Such a requirement would promote efficiency, stimulate interest and induce some to assume the obligations of the full training.

The general nurse must supplement her experience in the insane hospital by that of general and special hospitals for other diseases. Some of our graduates have been able to arrange for themselves such special courses, particularly in the New York polyclinic. Our interest in their development and success will command our earnest effort to facilitate such arrangements, and if possible establish a definite relation of our school to other hospitals for this purpose.

THE INSTABILITY OF SERVICE

so universal and regrettable in institutions for the insane affects this hospital to a notable degree. The nursing staff on the average rotated 2.75 times during the year, compared with 2.52 times in the six State hospitals. This means an average tenure of 4.36 months, a handicap which would defeat any business enterprise and which imposes such limitation of the usefulness and efficient administration of the hospital as to require the most serious consideration. The handicap is greater in the men's department, where there were 4.31 rotations and 2.78 months' average tenure, against 3.07 rotations and 3.9 months in the six State hospitals. Like variation in the women's and men's services in other State institutions suggests inherent differences which cannot be discussed at this time. A beginning has been made in the endeavor to better these conditions by advancing the scale of wages to the standard prevailing in other State hospitals. The result has been more satisfactory in the women's department. Further improvement may be anticipated if your recommendations to the Legislature lead to granting sufficient funds to reduce the hours of duty to a sixty-hour-a-week basis. Betterment, however, must necessarily be gradual, as the fruit of continuous study and persistent effort to eliminate obstacles. Certain needs are obvious, such as more adequate accommodations for families of efficient officers and nurses, better conditions of living, inducements to enter the service as a vocation, and assurance of reasonable provision for old age.

THE MEDICAL WORK

was greatly increased by the demands of the diphtheria epidemic, which almost exhausted at times the energies of physicians and nurses, who were tireless in their response. Hydrotherapeutic measures, such as the wet pack and prolonged bath, have been applied with greater frequency in the treatment of patients, with good effect. The diminution of mechanical restraint and seclusion of patients is most gratifying, and indicative of earnest and resourceful effort by physicians and nurses. There has been no resort to restraint of a male patient since

July. An occasional autopsy has been done. There is great need of a suitable laboratory for clinical and pathological examinations and scientific research. Steps are being taken to prepare and equip two rooms designed for this purpose in the basement of the Stedman building. The usual clinics have been given to the students of the Tufts and Harvard medical schools.

REPAIRS AND MINOR IMPROVEMENTS

have been made to an average amount but considerably in excess of the previous year. Granolithic walks were laid around the oval between the B and C buildings and out to the Canterbury Street entrance. The old plank siding along Austin Street was replaced by a cinder walk. Iron fire escapes were erected from the second story at either end of the B building and from the first story front and rear, also from wards 5 and 6, 7 and 8, and the rear extension of the north wing at the men's department. A granolithic floor was put down in the scullery of the men's kitchen. The walk over the basement passage between the Walker and Stedman buildings was roofed over and enclosed in glass, affording a solarium for the use of tubercular patients temporarily, but eventually for other classes.

Good progress has been made in painting, which should be continued throughout the hospital. It has been completed in the women's chapel and B building and the exterior of the corridors connecting them with the A building, on the interior of the men's chapel and six wards, and is now going on in the C building.

Electric fans were installed in the laundry to remove the steam from the wash room. The engineer has been energetic in improving the heating apparatus. The steam mains under A corridor and in other exposed places have been reboxed and packed with mineral wool; much naked piping has been insulated with magnesia covering; long circuits have been cut out by short direct connections; several traps have been relocated to shorten returns. These alterations and many ordinary repairs have been done by the regular engineering force at no additional expense, except for a small amount of material.

GYPSEY AND BROWN-TAIL MOTHS

badly infested the trees and shrubs of the grounds and farm. The usual methods were employed to destroy them and limit their spread, at an outlay of more than \$2,000 in doing only necessary work. Although many dead or diseased trees were cut or trimmed, energetic effort will be required in this direction the coming year, especially upon the recently acquired property, which was neglected last season. Steps are being taken to accomplish this by our own labor as far as possible.

MAINTENANCE EXPENSES

in the gross amounted to \$191,980.75, which, divided by the average number of patients in the hospital, 767.37, yields a gross average weekly per capita cost of \$4.798.

Receipts for board of private patients were \$15,552.82; from partial payments for board of patients, \$6,037.75; from sales and other sources, \$1,222.38; making a total income of \$22,812.95.

Deducting receipts from gross expenses, the net cost of maintenance was \$169,167.80, which, divided by the above average number of patients, yields a net average weekly per capita cost of \$4.228.

The gross expenses exceeded those of the previous year by \$28,112, which are accounted for in the main as follows: —

Increase in salaries, wages and labor,	\$4,665
Cost of water (not paid by the hospital last year),	4,687
Excess of repairs and minor improvements,	7,013
Expenses of diphtheria epidemic and investigations,	1,695
Excess in purchase of clothing,	2,431
Excess in purchase of furnishings,	1,912
Destruction of gypsy and brown-tail moths (no expense to hospital last year),	2,085
Excess in purchase of live stock, carriages, wagons, etc.,	3,576
Total,	\$28,064

It may be added that economy prevailed in all city departments last year, and it would be natural to expect that during

the closing period of municipal administration of the hospital general expenses, repairs and improvements, and stock on hand would be reduced to a minimum. In confirmation, it appears that maintenance expenses were about \$7,000 less than the previous year, although an average of 52 more patients were supported.

Certain additional demands necessitate the increase of estimates for maintenance the coming year up to \$213,550. An average of 53 more patients must be cared for. The advanced scale of wages, which was operative only five months last year, must be paid for the full twelve months. The reduction of hours of work to a sixty-hour-a-week basis will require the employment of at least 25 more persons, for whom wages, board and room furnishings must be provided.

THE DEVELOPMENT OF THE HOSPITAL

should proceed according to a well-considered plan. In accordance with your instructions preliminary studies have been made with reference to (1) the natural approaches, roadways and water courses with a view to rendering available every building site consistent with proper separation of classes and reservation of sufficient spaces for exercise and recreation of patients; (2) the location of the administrative center, service buildings and heat and power plant in relation to the main groups of patients' buildings; and (3) the presentation of a comprehensive but tentative scheme for review and gradual elaboration. The landscape features are receiving the attention of Mr. Arthur A. Shurtleff. Under his direction the necessary surveys are being made.

CERTAIN STRUCTURAL NEEDS

are imperative. Facilities for electrical treatment, hydrotherapy and other forms of physical therapeutics are indispensable in the equipment of the modern hospital. These could be provided by an addition to the south end of the Butler building, in which a general treatment room might be had on the ground floor and provision for prolonged baths and other hydrotherapeutic measures in connection with each of the present wards on the first and second floors.

The Stedman wards were designed for the reception and treatment of new patients, and are well adapted to the purpose, but are now crowded with chronic cases of the old, feeble or bedridden class. Infirmary buildings should be constructed for the care of such patients. Relief of the Stedman building in this way would greatly improve the classification of recent cases and add much-needed capacity for patients pressing for admission to the hospital.

The laundry is now much cramped for room and will be utterly inadequate to the demands growing out of enlargement of the institution.

The carpenter and machine shops are small and are not equipped with machinery and power.

There is no industrial room for patients. The sewing and mending room does not afford space for one-third of the patients who might find beneficial and useful occupation in it.

All these purposes might be served temporarily by a building which could eventually be utilized solely for a laundry.

With your approval, working plans, specifications and estimates for such buildings have been prepared, and are recommended for submission to the Legislature with your petition for appropriations as follows: —

Constructing and furnishing an addition to the Butler building to provide treatment rooms for acute and curable patients,	\$39,000
Constructing and furnishing three infirmary buildings sufficient to accommodate 300 patients, with the necessary officers and nurses,	275,000
Constructing and equipping a building for the extension of the present laundry and for temporary use as carpenter and machine shops, industrial rooms for patients, and other purposes,	44,000

Dr. E. C. Noble was appointed on the staff of the men's department and began his duties March 15. After four and one-half years' service in the women's department, Dr. Francis X. Corr resigned November 1, and has opened an office in Warren Chambers, Boylston Street. On August 1 Mr. William E. Elton had the treasurership added to his duties as steward.

Although such a combination is wise under present conditions and efficient in operation, and was made on my recommendation, nevertheless, as a matter of principle the two offices should be kept distinct, and as soon as the growth of the hospital shall warrant the additional expense their separation should be anticipated. Miss Florence N. Spidle was promoted from assistant matron to matron in October.

Our thanks are extended to Dr. John Dixwell and his associates of the Hospital Music Association, to the Dorchester Woman's Club and the Harvard Improvement Association Choral Union for their very enjoyable entertainments. Magazines and other reading matter have been gratefully received from the Boston Public Library and the Hospital Newspaper Society, which have given pleasure to many patients on the wards. It is hoped that our old friends may continue to remember us and that new ones may join them in the endeavor to brighten the lives of our patients.

I feel a deep sense of obligation to the faithful officers, nurses and employees who have made possible whatever has been accomplished during the year. I am profoundly grateful for your patient consideration and wise direction in many perplexing situations.

Respectfully submitted,

OWEN COPP,

Superintendent.

Nov. 30, 1909

SUPERINTENDENT OF NURSES' REPORT.

To the Superintendent of the Boston State Hospital.

The tenth annual report of the Training School for Nurses is herewith respectfully submitted:—

Graduating Class of 1909.

Ida C. Aitken.	Elizabeth M. Hartley.
Edith E. Dorey.	Catherine McKinnon.
Frances L. French.	Ruby L. Sperry.
Elizabeth A. Gunn.	Lottie Urquhart.

Nursing Staff.

Superintendent of nurses,	1
Assistant superintendent of nurses (graduate),	1
Head nurses, day (graduates),	6
Head nurse, night (graduate),	1
Day nurses (graduates),	11
Night nurse (graduate),	1
Pupils, day,	10
Pupils, night,	3
Probationers,	4
Attendants,	27
Applicants during the year,	272
Applicants accepted,	48
Probationers accepted as pupils,	12
Pupils left,	6
Probationers rejected,	12

The training school has graduated 8 nurses during the year, making a total of 64 nurses since it was organized. Twenty of our graduates are still in the hospital, 6 are in charge of buildings, 1 is assistant superintendent of nurses and 1 is night head nurse. Seven of our graduates have left during the year, 4 of whom have entered a general hospital for a post-graduate course and 1 is doing private nursing.

The following subjects are covered:—

Junior Year.—Bones, joints, muscles, digestion, circulation, histology, secretion, bandaging, bacteriology, pathology, diseases of the bones, fractures and dislocations, skin, urinary tract, respiratory tract, hemorrhages, hygiene, chemistry and clinical instruction.

Senior Year.—Tuberculosis, emergencies, sepsis, asepsis, antisepsis, surgical dressings, materia medica, gynecology, obstetrics, immunity, serum therapy and vaccines, acute infectious diseases, symptomatology, anatomy and physiology of the nervous system, psychiatry, massage, cooking and clinical instruction.

We again wish to express our appreciation for the assistance rendered by the consulting staff and Dr. Linneus A. Roberts, who have given courses during the year, also to the resident staff for their interest in the promotion of the work.

Respectfully submitted,

JANE ROBERTSON,

Superintendent of Nurses.

VALUATION.

Nov. 30, 1909.

Buildings and 153 acres land taken from the city of Boston Dec. 1, 1908, . . .	\$1,000,000 00	
79 acres land taken Oct. 1, 1909, assessed for	62,710 00	
2½ ₂₀ acres land purchased Nov. 3, 1909, for Observation Hospital,	75,919 20	
	<hr/>	\$1,138,629 20
Provisions and groceries,	\$3,511 20	
Clothing and clothing materials,	7,385 72	
Furnishings,	42,140 52	
Heat, light and power:—		
Fuel,	722 00	
Repairs and improvements:—		
Machinery and mechanical fixtures,	20,620 00	
All other property,	3,402 76	
Farm, stable and grounds:—		
Live stock on farm,	6,420 00	
Produce of farm on hand,	6,635 05	
Carriages and agricultural imple- ments,	5,542 69	
All other property,	974 00	
Miscellaneous,	2,564 56	
	<hr/>	99,918 50
		<hr/>
		\$1,238,547 70

TREASURER'S REPORT.

To the Trustees of the Boston State Hospital.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1909:—

CASH ACCOUNT.

Receipts.

Institution Receipts.

Board of inmates :—

Private,	\$15,552 82	
Reimbursements,	6,037 75	
	<hr/>	\$21,590 57

Salaries, wages and labor :—

Wages not called for,	10 35
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Sales :—

Food,	\$316 93	
Clothing and materials,	26 71	
Furnishings,	14 13	
Miscellaneous,	9 12	
	<hr/>	366 89

Farm, stable and grounds :—

Cows and calves,	\$191 17	
Pigs and hogs,	257 14	
Hides,	45 39	
Sundries,	171 14	
	<hr/>	664 84

Miscellaneous receipts :—

Interest on bank balances,	\$148 86	
Rent,	23 00	
Sundries,	8 44	
	<hr/>	180 30

\$22,812 95

Receipts from Treasury of Commonwealth.

Maintenance appropriations :—

Advance money,	\$10,000 00	
Approved schedules of 1909,	\$174,326 34	
Less returned,	12 00	
	<hr/>	\$174,314 34

184,314 34

Total, \$207,127 29

Payments.

To treasury of Commonwealth, institution receipts,	\$22,812 95	
Maintenance appropriations : —		
Eleven months' schedules, 1909,	174,314 34	
November advances,	9,017 21	
	<hr/>	\$206,144 50
Balance Nov. 30, 1909 : —		
In bank,	\$935 60	
In office,	47 19	
	<hr/>	982 79
		<hr/>
Total,		\$207,127 29

MAINTENANCE.

Appropriation,	\$192,000 00
Expenses (as analyzed below),	191,980 75
	<hr/>
Balance reverting to treasury of Commonwealth,	\$19 25

Analysis of Expenses.

Salaries, wages and labor : —		
General administration,	\$27,394 39	
Medical service,	8,528 60	
Ward service (male),	10,720 79	
Ward service (female),	17,298 91	
Repairs and improvements,	3,398 29	
Farm, stable and grounds,	8,151 20	
	<hr/>	\$75,492 18
Food : —		
Butter,	\$3,853 84	
Butterine,	2,611 82	
Beans,	642 45	
Bread and crackers,	192 12	
Cereals, rice, meal, etc.,	983 84	
Cheese,	1,191 52	
Eggs,	3,100 72	
Flour,	4,930 85	
Fish,	1,815 97	
Fruit (dried and fresh),	1,573 73	
Meats,	11,161 54	
Milk,	42 79	
Molasses and syrup,	261 43	
Sugar,	2,979 66	
Tea, coffee, broma and cocoa,	2,012 09	
Vegetables,	1,161 46	
Sundries,	2,554 61	
	<hr/>	41,070 44
Clothing and materials : —		
Boots, shoes and rubbers,	\$1,133 50	
Clothing,	3,262 42	
Dry goods for clothing and small wares,	1,605 72	
Furnishing goods,	551 43	
	<hr/>	
Amounts carried forward,	\$6,553 07	\$116,562 62

<i>Amounts brought forward,</i>	\$6,553 07	\$116,562 62
Clothing and materials — <i>Con.</i>		
Hats and caps,	53 07	
Leather and shoe findings,	8 80	
Sundries,	14 00	
		6,628 94
Furnishings : —		
Beds, bedding, table linen, etc.,	\$4,848 72	
Brushes, brooms,	366 70	
Carpets, rugs, etc.,	534 95	
Crockery, glassware, cutlery, etc.,	760 16	
Furniture and upholstery,	478 50	
Kitchen furnishings,	494 55	
Wooden ware, buckets, pails, etc.,	58 40	
Sundries,	1,252 67	
		8,794 65
Heat, light and power : —		
Coal,	\$18,982 51	
Electricity,	14 70	
Oil,	107 15	
Sundries,	693 60	
		19,797 96
Repairs and improvements : —		
Cement, lime and plaster,	\$75 62	
Doors, sashes, etc.,	299 89	
Electrical work and supplies,	193 22	
Hardware,	637 01	
Lumber,	560 75	
Machinery, etc.,	527 54	
Paints, oil, glass, etc.,	1,595 57	
Plumbing, steam fitting and supplies,	1,459 45	
Roofing and materials,	40 72	
Sundries,	4,025 11	
		9,414 88
Farm, stable and grounds : —		
Blacksmith and supplies,	\$683 05	
Carriages, wagons, etc., and repairs,	2,979 48	
Fertilizers, vines, seeds, etc.,	720 43	
Hay, grain, etc.,	4,308 37	
Harnesses and repairs,	201 72	
Horses,	1,245 00	
Cows,	915 00	
Other live stock,	30	
Rent,	1,500 00	
Tools, farm machines, etc.,	247 16	
Sundries,	2,952 75	
		15,753 26
Miscellaneous : —		
Books, periodicals, etc.,	\$174 33	
Chapel services and entertainments,	1,277 90	
Freight, expressage and transportation,	109 52	
Funeral expenses,	10 15	
Gratuities,	142 90	
Hose, etc.,	111 93	
Medicines and hospital supplies,	2,336 12	
<i>Amounts carried forward,</i>	\$4,162 85	\$176 952 31

Amounts brought forward, \$4,162 85 \$176,952 31

Miscellaneous — *Con.*

Medical attendance, nurses, etc. (extra),	1,380 94	
Postage,	313 42	
Printing and printing supplies,	194 11	
Return of runaways,	19 75	
Soap and laundry supplies,	1,678 47	
Stationery and office supplies,	770 07	
Travel and expenses (officials),	168 03	
Telephone and telegraph,	459 99	
Tobacco,	520 64	
Water,	4,687 20	
Sundries,	672 97	
		<hr/>
		15,028 44
		<hr/>
Total expenses for maintenance,		\$191,980 75

SPECIAL APPROPRIATIONS.

Appropriations for fiscal year,	\$600,000 00
Expended during the year (see statement annexed),	81,025 92
	<hr/>
Balance Nov. 30, 1909,	\$518,974 08

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$982 79	
November cash vouchers (paid from advance money),	9,017 21	
Due from treasury of Commonwealth account		
November, 1909, schedule,	7,666 41	
		<hr/>
		\$17,666 41

Liabilities.

Schedule of November bills,	\$17,666 41
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Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
For the purpose of establishing in the city of Boston a hospital for the first care and observation of mental patients and the treatment of acute and curable mental diseases,	Acts 1909, chap. 470,	\$600,000 00	\$81,025 92 ¹	\$81,025 92	\$518,974 08

¹ Paid direct from State treasury.

Respectfully submitted,

WILLIAM E. ELTON,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE BOSTON STATE HOSPITAL.

Superintendent,	None
Assistant superintendent (per year),	\$2,500 00
Assistant physician (per year),	1,800 00
Assistant physician (per year),	1,400 00
Assistant physician (per year),	1,000 00
Assistant physician (per year),	700 00
Treasurer and steward (per year),	1,800 00
Chief engineer (per month),	120 00
Farmer (per year),	1,000 00
Assistant farmers (2) (per month),	\$30 00 to 40 00
Gardeners (2) (per month),	35 00 to 55 00
Matron (per month),	40 00
Superintendent of nurses (per year),	800 00
Assistant superintendent of nurses (per month),	45 00
Stenographers (3) (per month),	\$30 00 to 65 00
Clerk (per month),	45 00
Typewriter (per month),	30 00
Seamstresses (2) (per month),	\$30 00 to 35 00
Laundryman (per month),	40 00
Laundry teamster (per month),	30 00
Laundress (per month),	40 00
Laundresses (9) (per week),	\$4 00 to 4 60
Baker (per month),	60 00
Assistant steward (per month),	50 00
Supervisor (man) (per month),	62 00
Supervisors (women, 2) (per month),	35 00
Assistant supervisors (men, 2) (per month),	\$30 00 to 45 00
Attendants (men, 34) (per month),	25 00 to 30 00
Attendants (women, 27) (per month),	20 00 to 25 00
Nurses (women, 34) (per month),	20 00 to 30 00
Office attendant (per month),	30 00
Table girls (6) (per week),	4 00
Chambermaid (per week),	4 00
Cooks (men, 2) (per month),	\$55 00 to 70 00
Cooks (women, 3) (per month),	22 00 to 25 00
Assistant cook (man) (per month),	35 00

Kitchen girl (per week),	\$4 00
Painter (per month),	70 00
Painters (2) (per week),	15 00
Mattress maker (per month),	20 00
Assistant engineers (7) (per week),	21 00
Assistant engineer, with board and lodging (per week),	17 55
Firemen (4) (per week),	17 50
Stablemen (2) (per month),	\$30 00 to 35 00
Chauffeur (per month),	25 00
Expressman (per month),	45 00
Teamsters (7) (per month),	\$25 00 to 28 00
Farm hands (5) (per month),	25 00 to 28 00
Herdsmen (per month),	45 00
Watchman (per month),	50 00
Carpenters (2) (per month),	70 00
Carpenter (per week),	15 00
Porters (2) (per month),	\$28 00 to 30 00

PRODUCTS OF THE FARM AND GARDEN.

GARDEN PRODUCTS.

Asparagus, $5\frac{1}{4}$ boxes,	\$22 31
Beans, shell, 16 bushels,	20 00
Beans, string, $101\frac{1}{2}$ bushels,	101 50
Beets, table, 250 bushels,	125 00
Beets, table, 6 bunches,	60
Beet greens, 80 bushels,	28 00
Cabbages, $\frac{3}{4}$ ton,	15 00
Carrots, 277 bushels,	166 20
Cauliflower, 752 heads,	75 20
Celery, 114 boxes,	96 90
Corn, sweet, 357 bushels,	267 75
Cress, 35 bunches,	3 50
Cucumbers, $9\frac{1}{4}$ boxes,	18 50
Cucumbers, pickling, $\frac{1}{2}$ bushel,	80
Dandelions, 4 bushels,	3 00
Kohl-rabi, 37 bushels,	18 50
Lettuce, 320 boxes,	240 00
Mint, 35 bunches,	1 75
Onions, 488 bunches,	9 76
Onions, 202 bushels,	171 70
Parsley, $1\frac{3}{4}$ bushels,	88
Parsnips, 204 bushels,	153 00
Peas, green, 81 bushels,	81 00
Peppers, 2 bushels,	1 50
Potatoes, 2,556 bushels,	2,328 20
Potatoes, small, 125 bushels,	25 00
Radishes, 76 dozen bunches,	19 00
Rhubarb, 4,998 pounds,	99 96
Spinach, $213\frac{3}{4}$ bushels,	85 50
Squash, winter, $5\frac{1}{6}$ tons,	155 00
Squash, summer, 2,098 pounds,	20 98
Tomatoes, ripe, $211\frac{1}{2}$ bushels,	158 63
Tomatoes, green, 52 bushels,	26 00
Turnips, 314 barrels,	392 50
Apples, $20\frac{3}{4}$ barrels,	62 25
Blackberries, 537 boxes,	53 70

Currants, 591 boxes,	.	.	.	.	.	.	.	\$65 01
Grapes, 1,303 pounds,	.	.	.	.	.	.	.	39 09
Pears, 18 bushels,	.	.	.	.	.	.	.	18 00
Raspberries, 67 boxes,	.	.	.	.	.	.	.	6 70
Strawberries, 7,265 boxes,	.	.	.	.	.	.	.	581 20

[illegible]

FARM PRODUCTS.

Ensilage, 190 tons,	\$950 00
Fodder, green, 322 tons,	1,610 00
Fodder, dry, 4 tons,	48 00
Hay, 165 tons,	2,970 00
Hay, bedding, 22 tons,	220 00
Mangel-wurzel, 1,025 bushels,	256 25
Manure, 420 cords,	2,520 00
Beef, 4,913 pounds,	343 91
Calves, 42,	84 00
Milk, 189,669 quarts,	9,483 45
Pork, 19,495 pounds,	1,559 60
Ice, 700 tons,	2,100 00
Wood, 20 cords,	90 00

[illegible][illegible][illegible]

STATISTICAL TABLES.

[FORM PRESCRIBED BY STATE BOARD OF INSANITY.]

1. — General Statistics of the Year.

	INSANE.			VOLUNTARY, NOT INSANE.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients in hospital Oct. 1, 1908,	328	486	814	-	-	-	328	486	814
Admitted within the year,	182	266	448	1	-	1	183	266	449
By commitment, ¹	146	188	334	1	-	1	147	188	335
By transfer,	2	8	10	-	-	-	2	8	10
From visit,	7	12	19	-	-	-	7	12	19
From visit, nominally for discharge,	27	58	85	-	-	-	27	58	85
Whole number of cases within the year,	510	752	1,262	1	-	1	511	752	1,263
Dismissed within the year,	178	294	472	1	-	1	179	294	473
Discharged,	60	123	183	1	-	1	61	123	184
as recovered,	9	45	54	-	-	-	9	45	54
as capable of self-support,	9	12	21	-	-	-	9	12	21
as improved,	33	39	72	-	-	-	33	39	72
as not improved,	9	27	36	-	-	-	9	27	36
as not insane,	-	-	-	1	-	1	1	-	1
Died,	59	73	132	-	-	-	59	73	132
Transferred,	34	56	90	-	-	-	34	56	90
Escaped,	4	-	4	-	-	-	4	-	4
On visit Oct. 1, 1909,	21	42	63	-	-	-	21	42	63
Patients remaining Sept. 30, 1909,	332	458	790	-	-	-	332	458	790
Supported as State patients,	298	368	666	-	-	-	298	368	666
as reimbursing patients,	10	25	35	-	-	-	10	25	35
as private patients,	24	65	89	-	-	-	24	65	89
Number of different persons within the year,	481	691	1,172	1	-	1	482	691	1,173
Number of different persons admitted,	154	206	360	1	-	1	155	206	361
Number of different persons admitted by commitment,	145	186	331	1	-	1	146	186	332
Number of different persons dismissed,	151	234	385	1	-	1	152	234	386
Number of different persons recovered,	9	45	54	-	-	-	9	45	54
Number of different persons capable of self-support,	9	12	21	-	-	-	9	12	21

Daily average number of patients, viz.: State, 633.36; reimbursing, 38.26; private, 98.23; total, 769.85.

¹ Includes 73 emergency cases, 66 of which were committed to this hospital, 1 to other hospitals and 6 discharged. Includes emergency and voluntary insane cases.

2. — *Insane received on First and Subsequent Commitments.*

NUMBER OF COMMITMENT.	CASES COMMITTED.		
	Males.	Females.	Totals.
First to this hospital,	132	166	298
Second to this hospital,	10	15	25
Third to this hospital,	2	5	7
Fourth to this hospital,	1	2	3
Fifth to this hospital,	1	—	1
Total cases,	146	188	334
Total persons,	145	186	331
Never before in any hospital for insane,	123	151	274

3. — *Nativity and Parentage of Insane Persons first admitted to Any Hospital.*

PLACE OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
Massachusetts,	52	10	12	57	17	21	109	27	33
Other New England States,	6	7	6	8	11	7	14	18	13
Other States,	8	7	6	9	7	7	17	14	13
Total native,	66	24	24	74	35	35	140	59	59
Other countries: —									
Africa,	—	—	—	1	—	—	1	—	—
Austria,	1	1	1	1	—	—	2	1	1
Belgium,	1	1	1	—	—	—	1	1	1
Canada,	12	14	13	22	17	21	34	31	34
England,	3	4	4	1	5	3	4	9	7
Germany,	4	5	5	5	8	8	9	13	13
Holland,	—	1	1	—	—	—	—	1	1
Ireland,	28	58	60	40	69	71	68	127	131
Italy,	2	3	2	1	2	2	3	5	4
Portugal,	—	—	—	—	1	1	—	1	1
Russia,	2	3	3	2	4	4	4	7	7
Scotland,	2	4	4	1	4	1	3	8	5
Sweden,	2	2	2	2	2	2	4	4	4
Switzerland,	—	—	—	—	1	—	—	1	—
Total foreign,	57	96	96	76	113	113	133	209	209
Total native,	66	24	24	74	35	35	140	59	59
Unknown,	—	3	3	1	3	3	1	6	6
Totals,	123	123	123	151	151	151	274	274	274

4. — *Residence of Insane Persons admitted by Commitment.*

PLACES.	FIRST ADMITTED TO ANY HOSPITAL.			OTHER ADMISSIONS.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Massachusetts: —									
Suffolk County,	121	139	260	22	33	55	143	172	315
Essex County,	-	1	1	-	-	-	-	1	1
Middlesex County,	-	3	3	-	-	-	-	3	3
Hampshire County,	-	1	1	-	-	-	-	1	1
Norfolk County,	1	1	2	-	-	-	1	1	2
Plymouth County,	-	1	1	-	-	-	-	1	1
Worcester County,	-	1	1	-	1	1	-	2	2
Total resident,	122	147	269	22	34	56	144	181	325
Canada,	-	1	1	-	-	-	-	1	1
New Hampshire,	-	1	1	-	-	-	-	1	1
Pennsylvania,	1	1	2	-	-	-	1	1	2
New York,	-	-	-	-	1	1	-	1	1
Rhode Island,	-	1	1	-	-	-	-	1	1
Total nonresident,	1	4	5	-	1	1	1	5	6
Cities or towns 10,000 or over,	121	150	271	22	35	57	143	185	328
County districts under 10,000,	2	1	3	-	-	-	2	1	3

5. — *Civil Condition of Insane Persons first admitted to Any Hospital.*

	Males.	Females.	Total.
Unmarried,	47	60	107
Married,	52	64	116
Widowed,	23	26	49
Divorced,	1	1	2
Totals,	123	151	274

6. — *Occupation of Insane Persons first admitted to Any Hospital.*

MALES.

Bartenders,	2	Metal worker,	1
Blacksmiths,	2	Musicians,	2
Carpenters,	2	Painter,	1
Contractor,	1	Pedler,	1
Conductor,	1	Pharmacist,	1
Cooks,	4	Plumber,	1
Engineer,	1	Salesmen,	11
Firemen,	4	Shoemakers,	4
Inspector,	1	Student,	1
Janitors,	2	Tailors,	3
Laborers,	32	Teamsters,	6
Mariner,	1	Typewriter,	1
Mason,	1	None,	30
Mechanics,	4		
Merchants,	2		123

FEMALES.

Actress,	1	Milliners,	2
Bookkeepers,	2	Nurse,	1
Cook,	1	Stenographer,	1
Domestics,	9	Teachers,	2
Dressmakers,	3	Waitress,	1
Factory girl,	1	None,	49
Governess,	1		
Housework,	72		151
Laundresses,	5		

7. — *Ages of Insane at First Attack, Admission and Death.*

	FIRST ADMITTED TO ANY HOSPITAL.				DIED.							
	AT FIRST ATTACK.			WHEN ADMITTED.		AT FIRST ATTACK.			AT DEATH.			
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Congenital,	5	4	9	—	—	—	1	—	1	—	—	—
15 years or less,	—	1	1	1	1	2	1	1	2	—	—	—
From 15 to 20 years,	4	7	11	4	6	10	—	2	2	1	1	2
20 to 25 years,	7	14	21	9	10	19	2	1	3	1	1	2
25 to 30 years,	12	13	25	12	17	29	5	2	7	6	1	7
30 to 35 years,	8	13	21	6	13	19	6	3	9	1	1	2
35 to 40 years,	13	15	28	13	13	26	5	5	10	5	5	10
40 to 50 years,	27	31	58	28	34	62	12	16	28	15	15	30
50 to 60 years,	17	23	40	21	24	45	9	11	20	9	14	23
60 to 70 years,	12	14	26	11	13	24	9	12	21	10	10	20
70 to 80 years,	12	14	26	13	17	30	7	14	21	7	16	23
Over 80 years,	3	1	4	5	3	8	2	6	8	4	9	13
Totals,	120	150	270	123	151	274	59	73	132	59	73	132
Unknown,	3	1	4	—	—	—	—	—	—	—	—	—
Total of persons,	123	151	274	123	151	274	59	73	132	59	73	132
Mean known ages (in years),	45.95	44.04	45	46.59	45.09	45.84	40.02	55.15	47.59	52.60	59.36	55.98

8. — Probable Cause of Mental Disease in Persons first admitted to Any Hospital.

EXCITING CAUSES.	ADMITTED.			PREDISPOSING CAUSES.					
	Males.	Females.	Totals.	HEREDITARY TENDENCY.		NEUROTIC TENDENCY.		INTEMPERANCE.	
				Males.	Females.	Totals.	Males.	Females.	Totals.
Apoplexy,	5	5	10	-	-	-	-	1	1
Arteriosclerosis,	7	4	7	-	-	-	-	-	-
Childbirth,	-	4	4	-	1	1	-	-	-
Congenital,	5	5	10	-	1	1	-	1	1
Consanguinity of parents,	-	2	2	-	-	-	-	1	1
Drug habit,	-	3	3	-	1	1	-	-	-
Epilepsy,	2	2	4	-	-	-	-	-	-
Grief,	-	1	1	-	-	-	-	-	-
Ill health,	2	5	7	1	-	1	-	-	-
Injury,	1	-	1	-	-	-	-	-	-
Intemperance,	13	13	26	2	1	3	-	13	26
Lactation,	-	3	3	-	-	-	-	-	-
Menopause,	-	14	14	-	1	1	-	-	-
Paralysis agitans,	-	1	1	-	-	-	-	-	-
Senility,	22	28	50	-	5	5	-	2	2
Syphilis,	4	5	9	-	-	-	-	-	-
Toxæmia,	3	-	3	-	-	-	-	-	-
Worry,	-	4	4	-	-	-	-	-	-
Totals,	64	95	159	3	10	13	13	18	31
Unknown,	59	56	115	8	15	23	5	-	-
Totals,	123	151	274	11	25	36	5	18	31

9. — Probable Duration of Mental Disease before Admission.

PREVIOUS DURATION.	FIRST ADMITTED TO ANY HOSPITAL.		
	Males.	Females.	Totals.
Congenital,	5	4	9
Less than 1 month,	15	36	51
From 1 to 3 months,	24	20	44
3 to 6 months,	20	15	35
6 to 12 months,	13	17	30
1 to 2 years,	19	22	41
2 to 5 years,	13	23	36
5 to 10 years,	5	9	14
10 to 20 years,	2	4	6
Totals,	116	150	266
Unknown,	7	1	8
Totals,	123	151	274
Average known duration (in years),	1.37	1.35	1.36

10. — *Form of Mental Disease in Patients committed or discharged, with their Condition on Discharge, or died.*

FORM OF DISEASE.	COMMITTED.			DISCHARGED.												DIED.			AGGREGATES.		
	Males.	Females.	Totals.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			Males.	Females.	Totals.			
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.									
A. — First admitted to any hospital: —																					
Hysterical insanity,	19	46	65	1	1	2	1	2	3	3	5	8	1	6	7	16	46	62			
Manic-depressive insanity,	9	20	29	—	—	—	1	1	2	6	12	18	—	6	6	9	20	29			
Dementia precox,	14	4	18	—	—	—	—	—	—	1	1	2	2	—	—	14	4	15			
Dementia, organic,	—	3	3	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—			
Confusional insanity, acute,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Delirium, acute,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Myxo-dematous dementia,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Involution psychoses: —																					
Melancholia,	4	11	15	4	4	8	—	—	—	—	7	7	—	—	—	—	15	15			
Senile dementia,	22	26	48	—	—	—	1	—	1	4	—	4	2	5	7	15	35	50			
Epileptic insanity,	2	3	5	—	—	—	—	—	—	1	—	1	—	1	1	4	2	6			
Infection psychosis,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
General paresis,	26	12	38	—	—	—	—	—	—	3	—	3	3	3	4	21	15	42			
Paranoia,	1	6	7	—	—	—	—	1	1	—	—	—	—	—	—	—	6	6			
Alcoholic insanity, acute,	4	1	5	1	—	1	1	1	1	1	1	2	1	—	—	4	1	5			
Alcoholic insanity, chronic,	9	5	14	—	—	—	1	6	7	4	2	6	—	—	—	5	8	13			
Alcoholic dementia,	—	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Imbecility,	5	4	9	—	—	—	—	—	—	5	—	5	—	1	1	5	1	6			
Drug psychosis,	—	3	3	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—			
Traumatic psychosis,	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Undiagnosed,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Totals,	123	151	274	8	31	39	5	10	15	28	28	56	8	23	31	102	158	260			

11. — Discharges of the Insane classified by Admission and Result.

NUMBER OF THE ADMISSION.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			DIED.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
First,	9	36	45	7	10	17	32	30	62	8	24	32	57	67	124	113	167	280
Second,	—	5	5	1	1	2	—	6	6	—	3	3	2	4	6	3	19	22
Third,	—	2	2	1	—	1	1	2	3	1	—	1	—	2	2	3	6	9
Fourth,	—	2	2	—	1	1	—	1	1	—	—	—	—	—	—	—	4	4
Totals,	9	45	54	9	12	21	33	39	72	9	27	36	59	73	132	119	196	315
First admitted to any hospital,	8	31	39	5	10	15	28	28	56	8	23	31	53	66	119	102	158	260

12. — Cause of Death and Form of Mental Disease in Persons who died.

CAUSES.	AGGREGATES.			MANIC-DEPRESSIVE INSANITY.			DEMENTIA PRÆCOX.			INFECTION PSYCHOSIS.			ACUTE DELIRIUM.			IMBECILITY.			INVOLUTION MELANCHOLIA.			SENILE DEMENTIA.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
General diseases: —																								
Alcoholism,	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Carcinoma,	—	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, pulmonary,	1	10	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Facial erysipelas,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Myxedema,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nervous system: —																								
Paralysis agitans,	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Status epilepticus,	2	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General paresis,	22	14	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute delirium,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exhaustion of manic-depressive insanity,	—	2	2	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic leptomeningitis,	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Circulatory system: —																								
Cardiac insufficiency,	10	—	10	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Organic heart disease,	10	8	18	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebral hemorrhage,	3	12	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phlebitis,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Respiratory system: —																								
Hypostatic pneumonia,	3	1	4	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lobar pneumonia,	1	2	3	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broncho pneumonia,	—	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Digestive system: —																								
Appendicitis,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis, acute,	4	4	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis, chronic,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Genito-urinary system: —																								
Nephritis, chronic,	1	4	5	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals,	39	73	132	6	11	17	2	3	5	2	—	2	—	1	1	—	—	1	1	4	5	10	31	41

12. — Cause of Death and Form of Mental Disease in Persons who died — Concluded.

CAUSES.	GENERAL PARESIS.			PARANOIA.			ORGANIC DEMENTIA.			EPILEPTIC INSANITY.			ACUTE ALCOHOLIC INSANITY.			ACUTE CONFUSIONAL INSANITY.			MYXO-DEMATOUS DEMENTIA.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
General diseases: —																					
Alcoholism,	1	—	1	—	—	—	1	1	—	—	—	—	1	—	1	—	—	—	—	—	—
Carcinoma,	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, pulmonary,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Facial erysipelas,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Myxœdema,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nervous system: —																					
Paralysis agitans,	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Status epilepticus,	—	—	—	—	—	—	—	—	—	2	1	3	—	—	—	—	—	—	—	—	—
General paresis,	22	14	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute delirium,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exhaustion of manic-depressive insanity,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic leptomeningitis,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Circulatory system: —																					
Cardiac insufficiency,	—	—	—	—	—	—	5	—	5	—	—	—	—	—	—	—	—	—	—	—	—
Organic heart disease,	—	—	—	—	—	—	3	—	3	1	—	1	—	—	—	—	—	—	—	—	—
Cerebral hemorrhage,	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Phlebitis,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Respiratory system: —																					
Hypostatic pneumonia,	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Lobar pneumonia,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broncho pneumonia,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
Digestive system: —																					
Appendicitis,	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis, acute,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis, chronic,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Genito-urinary system: —																					
Nephritis, chronic,	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Totals,	22	14	36	—	3	3	12	1	13	2	2	4	1	—	1	—	2	2	—	1	1

13. — *Duration of Mental Disease and its Treatment in Persons who recovered or died.*

PERIOD.	FIRST ADMITTED TO ANY HOSPITAL.						ALL OTHER ADMISSIONS.					
	DURATION BEFORE ADMISSION.			HOSPITAL RESIDENCE.			WHOLE DURATION.			WHOLE KNOWN PERIOD OF MENTAL DISEASE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
A. — Recovered: —												
Under 1 month, .	4	11	15	1	5	6	—	3	3	1	—	1
From 1 to 3 months, .	2	10	12	3	11	14	4	12	16	—	—	—
3 to 6 months, .	—	4	4	—	9	9	—	8	8	1	1	1
6 to 12 months, .	—	3	3	2	5	7	1	4	5	—	2	2
1 to 2 years, .	2	1	3	—	1	1	1	2	3	—	5	5
2 to 5 years, .	—	2	2	2	—	2	2	2	4	—	5	5
Over 5 years, .	—	—	—	—	—	—	—	—	—	—	1	1
Totals,	8	31	39	8	31	39	8	31	39	1	14	15
Average of known cases (in months),	9.18	3.17	6.18	6.45	3.97	5.21	16.12	3.57	9.85	.90	19.86	10.38
										.60	26.15	13.37

13. — Duration of Mental Disease and its Treatment in Persons who recovered or died — Concluded.

PERIOD.	FIRST ADMITTED TO ANY HOSPITAL.						ALL OTHER ADMISSIONS.					
	DURATION BEFORE ADMISSION.			HOSPITAL RESIDENCE.			WHOLE DURATION.			WHOLE KNOWN PERIOD OF MENTAL DISEASE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
B. — Died:—												
Under 1 month,	8	14	22	18	9	27	7	4	11	—	—	—
From 1 to 3 months,	9	4	13	7	12	19	2	3	5	—	—	—
3 to 6 months,	5	6	11	8	10	18	3	5	8	—	—	—
6 to 12 months,	8	11	19	6	8	14	5	8	13	—	—	—
1 to 2 years,	7	10	17	4	12	16	12	11	23	—	—	—
2 to 5 years,	10	14	24	7	11	18	13	21	34	2	1	3
5 to 10 years,	—	5	5	—	2	2	2	10	12	—	5	5
10 to 20 years,	2	1	3	3	—	3	5	1	6	2	—	2
Over 20 years,	—	—	—	—	2	2	—	2	2	1	—	3
Totals,	49	65	114	53	66	119	49	65	114	5	7	12
Unknown,	4	1	5	—	—	—	4	1	5	1	—	1
Totals,	53	66	119	53	66	119	53	66	119	6	7	13
Average of known cases (in months),	17.43	15.88	16.66	15.50	19.7	17.6	36.56	35.58	36.07	135	175	155
										95.35	69.8	82.1

SECOND ANNUAL REPORT

OF THE

TRUSTEES

OF THE

BOSTON STATE HOSPITAL,

FOR THE YEAR ENDING NOV. 30, 1910.



BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1911.

SECOND ANNUAL REPORT

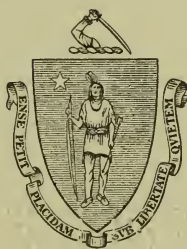
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JAN 21 1921

STATE HOUSE, BOSTON

Mass. Official

APPROVED BY

THE STATE BOARD OF PUBLICATION.

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OFFICERS

OF THE

BOSTON STATE HOSPITAL.

TRUSTEES.

WALTER CHANNING, M.D., <i>Chairman</i> ,	Brookline.
HENRY LEFAVOUR, <i>Secretary</i>,	. . . . .	Boston.
Mrs. HENRIETTA S. LOWELL,	. . . . .	Brookline.
JOSEPH KOSHLAND,	. . . . .	Boston.
Mrs. KATHERINE G. DEVINE,	. . . . .	Boston.
WILLIAM TAGGARD PIPER,	. . . . .	Cambridge.
MICHAEL J. JORDAN,	. . . . .	Dorchester.

Stated meetings of the trustees are held at the hospital on the second Tuesday of each month.

OFFICERS.

HENRY P. FROST, M.D.,	. . . . .	<i>Superintendent.</i>
SAMUEL W. CRITTENDEN, M.D.,	. . . . .	<i>Assistant Superintendent.</i>
GEORGE H. MAXFIELD, M.D.,	. . . . .	<i>First Assistant Physician.</i>
MARY E. GILL, M.D.,	. . . . .	<i>Assistant Physician.</i>
ERMY C. NOBLE, M.D.,	. . . . .	<i>Assistant Physician.</i>
STEPHEN E. VOSBURGH, M.D.,	. . . . .	<i>Assistant Physician.</i>
HARRY M. NICHOLSON, M.D.,	. . . . .	<i>Junior Assistant Physician.</i>
MYRTELLE M. CANAVAN, M.D.,	. . . . .	<i>Pathologist.</i>
WILLIAM E. ELTON,	. . . . .	<i>Treasurer and Steward.</i>
JANE ROBERTSON,	. . . . .	<i>Superintendent of Nurses.</i>
JESSIE M. BUIST,	. . . . .	<i>Assistant Superintendent of Nurses.</i>
FLORENCE N. SPIDLE,	. . . . .	<i>Matron.</i>
ARTHUR E. MORSE,	. . . . .	<i>Chief Engineer.</i>
LOUIS S. WHITE,	. . . . .	<i>Farmer.</i>

VISITING COMMITTEES, 1910-11.

February,	. . . . .	Mrs. DEVINE and Mrs. LOWELL.
March,	. . . . .	Mr. LEFAVOUR and Mr. KOSHLAND.
April,	. . . . .	Mr. JORDAN and Mr. PIPER.
May,	. . . . .	Dr. CHANNING and Mr. KOSHLAND.
June,	. . . . .	Mrs. DEVINE and Mrs. LOWELL.
July,	. . . . .	Dr. CHANNING and Mr. PIPER.
August,	. . . . .	Mr. LEFAVOUR and Mrs. LOWELL.
September,	. . . . .	Mr. KOSHLAND and Mr. JORDAN.
October,	. . . . .	Mrs. DEVINE and Mrs. LOWELL.
November,	. . . . .	Mr. LEFAVOUR and Mr. PIPER.
December,	. . . . .	Mr. KOSHLAND and Mr. JORDAN.
January,	. . . . .	Dr. CHANNING and Mrs. DEVINE.

The Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor and the Honorable Council.

The trustees of the Boston State Hospital have the honor to present herewith their second annual report.

DEVELOPMENT OF THE HOSPITAL.

In the last report it was stated that the trustees and the superintendent had devoted much attention to the study of plans for the development of the hospital, the expectation being that several thousand patients must be provided for in the future. As a result of further deliberations a general layout of buildings, subject to modification, has been decided on as follows: at the corner of Austin and Canterbury streets a reception group for both sexes; an industrial group for women on Canterbury Street, which will provide for quiet cases able to work, and some of whom will eventually recover; a custodial and infirmary group for both sexes is already being erected not far from the buildings at the men's department, and there will be a second one for the same class of patients; at the corner of Walkhill and Harvard streets an industrial group for men; then to the north, on Harvard Street, a group of farm cottages for male patients. These various buildings all have slightly locations, and, while not too near, are well placed in relation to each other and convenient of access and administration. It will be seen that the plan outlined provides for a large number of patients, from those, on the one hand, needing thorough hospital treatment, to those, on the other, who have become chronic and capable of doing only the simplest kind of outdoor work.

As a first step toward the enlargement of the hospital the

trustees asked, in their last report, for an appropriation of \$358,000; \$275,000 to be expended on an infirmary group for 300 patients; \$39,000 for an addition to the Butler building, for the treatment of acute cases; and \$44,000 for a laundry building, which would also provide room for some of the industrial occupations.

The Legislature granted the appropriation toward the end of the session of 1910. As soon after as possible the necessary proposals for all the buildings were advertised, and contracts awarded in September. Work was begun immediately, and at the date of this report is well under way. The foundations of the basement of the infirmary buildings are finished, and laying the brick for the walls will begin at once. The laundry and the Butler addition will soon be roofed in. Both the latter buildings should be ready for use in the spring of 1911. The Butler addition has wards for acute cases, with prolonged baths. The whole building will furnish very complete and much-needed facilities for treatment. In the basement the hydrotherapy plant, electrical, massage, rest and dressing rooms are located. The laundry building will make it possible to employ many more patients in that department, and give more room for shops for industries.

PSYCHOPATHIC HOSPITAL.

A further step in the development of the hospital will be the erection of the psychopathic hospital. Last year, under the heading of the "Hospital for the First Care and Observation of Acute Cases," we stated that land had just been purchased for a site at the corner of the Parkway, Brookline Avenue, Fenwood Road and Vila Street.

Preliminary plans for a building had already been made by the State Board of Insanity for another site, and it was hoped that these might be to some extent available. While they have been suggestive, numerous problems have arisen in designing a building for which there was practically no precedent, and many months of hard work have been expended by Dr. Copp, who has acted as agent of the building committee, Messrs. Kendall, Taylor & Co., the architects, and French & Hubbard,

engineers. Working plans and specifications for the construction of the building were finally ready, and bids were advertised for in October and the contract awarded early in November. At the present date the basement has been excavated and the forms for the concrete foundation are being put in place. The contract calls for the completion of the building January, 1912, and, unless unforeseen difficulties arise, the hospital should be open for patients in the late spring of 1912.

TEMPORARY CARE CASES.

The trustees were requested by the State Board of Insanity, under chapter 307, Acts of 1910, to assume, on May 1, 1910, the temporary care and observation of persons suffering from mental disorders who should come under the care of the police in the city of Boston, pending examination and commitment. To make proper provision for them, it was necessary to vacate the Butler building, which had hitherto been used for disturbed and excited women. One floor was set apart for men and one for women. The total number received from May 1 to December 1 has been 198; 115 of these being men and 83 women. When the addition to the Butler building is completed, the facilities for treating these patients will be much improved. The added care and expense of looking after such a large increase in the admissions have been considerable, but such admissions have made the medical service more active, and been one of the means leading to a better classification of the patients, which the superintendent is gradually accomplishing.

ADMINISTRATION.

In the previous report attention was called to the difficulty of administering the departments for men and women, which had hitherto been very much like two separate institutions with many duplications and consequent waste of time and money. The effort has been made to centralize the management of the medical and business affairs at the women's department. The superintendent and the steward, who is also the treasurer, have their offices at this department, and the stores for the whole insti-

tution are kept there. All temporary care cases, both male and female, are received at this department, and the new laboratory, which is already doing excellent work, is in the basement of one of the buildings. The Butler addition, the new laundry, the proposed service building, the electric light plant and the already installed central telephone exchange are all located there, with the idea of gradually doing away with unnecessary duplication, and making management from one center efficient and economical. As the institution increases in size, the wisdom of so doing will become more and more apparent.

It can be said, without exaggeration, that the spirit pervading the institution has gone on steadily improving since our last report. The change is noticeable from the medical officers through the whole staff of employees. The quality of work is better, and a spirit of cheerful co-operation pervades the entire hospital. The trustees are gratified at the advance made in this direction.

OCCUPATION OF PATIENTS.

It will be seen from the superintendent's report that steady progress has been made in improving the medical care of patients, and soon it should be on a par with that in the best State hospitals. An important factor in this improvement is the increase in occupation. The July report of the superintendent states that in 1909, during the month of June, 136 men and 129 women were employed, whereas in the corresponding month in 1910 there were 186 men and 253 women. It is satisfactory to know that among the outdoor workers were demented, untidy and disturbed patients who hitherto had been idle in the wards. One especially valuable piece of work done by the outdoor workers was the filling in of the new road from the Butler building to Harvard Street, and excavating for the addition. This was quite a large undertaking, and was a saving to the State as well as a benefit to the patients. As the superintendent gives a detailed statement of the kinds of occupation, nothing need be said here on the subject. The trustees hope to continue to find congenial employment for patients, until all who are able have something to do.

REPAIRS AND IMPROVEMENTS.

The year has been a busy one in this department as appears from the superintendent's report. Much outside and inside painting and mason and carpentering work have been done. Special attention has been paid to the barns, basements, corridors and out-of-the-way places, which were sadly in need of renovating. The solarium and laboratory, both valuable improvements, were completed at small expense by the hospital mechanics. The appearance of the grounds has been much improved by clearing up the Callahan property, from which old buildings, walls and fences have been removed.

While a good deal has been accomplished, much remains to be done before the trustees will feel that the hospital is in first-rate condition. The barns, stables and piggery are all old and unfit for use, and should be pulled down and replaced by others. The plumbing in many wards is worn out, and so unsanitary that it should be removed.

The wards would be much pleasanter to live in if they could be fitted up with enough furniture to make them homelike. It will take a liberal expenditure each year for several years, but as much as possible should be done if we wish to accomplish the best results, both from the medical and the humanitarian points of view.

APPROPRIATIONS FOR 1911.

The maintenance appropriation asked for this year is \$223,600, or an increase of \$10,050 over last year. This increase is mainly accounted for by the increased compensation and shorter hours of nurses, salaries and wages for a larger medical and general staff, temporary care cases, and the cost of board of a larger number of patients.

To carry out the plans of the trustees for the further growth of the hospital, the following special appropriations are respectfully asked for: in visiting the buildings in the men's department legislative committees have very justly criticised the large amount of unnecessary space taken up by halls and passageways, and also the cheerlessness of them. Plans have been

prepared for throwing some of these halls into the wards and taking down partition walls, in this way giving more light and enough extra space to accommodate about 32 patients. For this purpose the trustees ask for the sum of \$6,000.

At present we have no proper quarters for male nurses, and this lack is one of the reasons why it is hard to retain good men in our employ. With the continually increasing number of patients, our present accommodations, poor as they are, are becoming overcrowded. We therefore ask for an appropriation of \$22,000 to provide a nurses' home for 35 men.

For a portion of a group of farm buildings, to comprise two dormitory buildings and a central service building, we ask an appropriation of \$83,000. The central service building will provide for the future needs of the entire group. At present we are hardly doing all that we should for our patients employed on the farm. They should live near their work, and be allowed liberty and privileges not possible for other and sicker patients. It will be of distinct advantage to have them in a group, and easily accessible to the farm and barns.

For a service building for the entire institution, including a bakery plant, we ask an appropriation of \$42,000. So far the hospital has had only a few small refrigerators and no store-room of adequate size. Consequently provisions cannot be kept in quantity, and only a limited stock of general supplies. Within a comparatively short time we shall have a population of upwards of 1,200. The economical administration of an institution caring for so many patients requires a thoroughly equipped service building, including a refrigerating plant.

When the infirmary buildings are completed an addition to the electric light and power plant will be needed. We ask \$13,875 for this purpose.

Summary of Appropriations for 1911.

Maintenance,	\$223,600
Special appropriations: —	
Alterations, buildings men's department,	6,000
Nurses' home,	22,000
Farm group,	83,000
Service building,	42,000
Addition to electric light and power plant,	13,875

RESIGNATION OF A MEMBER OF THE BOARD.

On Oct. 19, 1910, the chairman received notification from Mr. Koshland that he had tendered his resignation to the Governor as a trustee. At the November meeting of the Board the following resolution was unanimously adopted: —

Resolved, That the secretary be directed to communicate to Mr. Joseph Koshland their very deep regret at his withdrawal from the Board, and their high appreciation of his valued services as a trustee.

RESIGNATION OF SUPERINTENDENT — APPOINTMENT OF SUPERINTENDENT AND DIRECTOR.

In February Dr. Copp resigned, finding it impossible to act as superintendent and at the same time perform his duties as executive officer of the State Board of Insanity. At a special meeting in March the Board voted to accept his resignation as superintendent, to take effect April 15, and it also voted "that the Board express to Dr. Copp its grateful appreciation of his very valuable and successful service in the interest of the hospital." At the same meeting, Dr. Henry P. Frost, first assistant physician of the Buffalo State Hospital, was elected superintendent, the appointment to take effect April 15. Dr. Frost had been for twenty years in the service of the State of New York, first at Willard, and later, for thirteen years, at Buffalo, and his recommendations were of the highest character. The trustees are glad to say that he has fully realized their anticipations of his medical and administrative ability.

Recognizing the importance of having a man of the highest attainments to take charge of the medical and scientific work of the psychopathic hospital, the trustees gave careful and prolonged consideration to the matter. As a result they tendered the appointment to Dr. Elmer E. Southard, professor of neuropathology in the Medical School of Harvard University, and pathologist to the State Board of Insanity. Dr. Southard has accepted the appointment under the title of director, and will enter on his duties when called on. In the meantime he has

given valuable advice as to the arrangement and equipping of the laboratories.

The reports of the superintendent and treasurer are appended.

Respectfully submitted,

WALTER CHANNING.

HENRY LEFAVOUR.

HENRIETTA LOWELL.

KATHERINE G. DEVINE.

MICHAEL J. JORDAN.

WILLIAM TAGGARD PIPER.

SUPERINTENDENT'S REPORT.

To the Trustees of the Boston State Hospital.

The annual report of the superintendent is respectfully submitted for the year ending Nov. 30, 1910, together with the statistics prescribed by the State Board of Insanity, which are for the year ending September 30.

There were 790 patients in the hospital at the beginning of the statistical year; the admissions numbered 597, the dismissals 371, deaths 155, leaving 861 at the close of the year.

The daily average number of patients was 816.41, of whom 694.40 were State charges, 39.59 reimbursing and 82.42 private; 1,323 different patients were in the hospital during the year.

There were 49 emergency, 10 voluntary and 165 temporary care cases; of the last mentioned, 55 were committed to this hospital, 54 committed to or returned to other hospitals, 46 were discharged without commitment, and 10 remained in the observation ward at the end of the period.

Exclusive of temporary care cases, transfers and returns from visit, 407 patients were received, of whom 350 were admitted for the first time, 36 for the second time and 21 for the third to ninth time.

The cases never before committed to any hospital for the insane numbered 330, of whom 166, or 50.3 per cent., were foreign born, and 263, or 79.6 per cent., were of foreign parentage on one or both sides.

The average age on admission of cases first admitted to any hospital was 46.17 years; 22.4 per cent. were 60 years of age or more.

The chief causes of insanity were senility in 15.4 per cent., alcoholic excesses in 10.6 per cent., and syphilis, apoplexy, arteriosclerosis and other organic conditions affecting the nervous system in 8.7 per cent.; 3 per cent. had congenital mental defect.

The duration of mental disease before admission to the hospital averaged 13.8 months; it was less than 6 months in 48.1 per cent.

Not more than 33.3 per cent. of cases first admitted were suffering from curable forms, such as manic-depressive insanity, toxic and exhaustion psychoses, etc.; 10.3 per cent. were cases of general paralysis.

The discharges, exclusive of transfers, numbered 237, of whom 65 were recoveries, being 10.9 per cent. of the admissions. If the temporary care cases be excluded, the discharges numbered 140, of whom 43 were recoveries, — 10.5 per cent. of commitments. On the same basis, 18 were discharged as capable of self-support and 53 as improved. Undoubtedly these figures are too low to represent the actual recovery rate, owing to the frequent failure to ascertain the condition of discharged patients at the end of the six months' trial period, an omission which it is now sought to supply by requiring them to return to the hospital for final examination, or to furnish otherwise satisfactory information on this point.

There were 155 deaths, 2 of which were in the temporary care service; excluding these, and figuring on the committed cases only, the deaths were 12.5 per cent. of the whole number of patients under treatment. This is an increasing percentage, due to the fact that we receive so large a proportion of the aged and feeble, and do not include this class in the periodical transfers which are made to asylums. Eighty-five, or 55.5 per cent., of those who died were over sixty years of age, and 21 were over eighty.

Death resulted from tuberculosis in 7 cases, from cerebral apoplexy in 11, from general paralysis in 35. Two of the deaths were suicides; 1 was from accidental injury and 1 from asphyxiation with food.

The hospital is caring for more patients than heretofore, notwithstanding its capacity is reduced by giving up the Butler building to the temporary care service, and using the farmhouse for employees instead of for patients' quarters. This has been made possible during the summer and fall by lodging 30 men patients in tents, and 9 women, cases of tuberculosis, in a canvas pavilion adjoining the infirmary ward. The patients who

had the fresh-air treatment were so greatly benefited by it, and were so comfortable and satisfied withal, that we are hoping to continue it next year on a larger scale.

The general health has been good throughout the year until October, when an outbreak of typhoid, or rather paratyphoid, fever occurred at the women's department, involving principally the nurses, but including among its victims to date the chief engineer, Mr. Morse, 2 cooks, the baker, a laundress, 2 porters and 2 male patients who were employed in the kitchen, — a total of 27 cases. Fortunately, no deaths have occurred, and at the present time most of the sick are convalescing. Owing to our lack of hospital accommodations for so many, 9 of the patients (nurses and other employees) were treated at the City Hospital. Through the kindness of Dr. Lesley H. Spooner of the Massachusetts General Hospital staff, who supplied the serum and demonstrated the method of administration, anti-typhoid inoculation was practiced on 48 of the officers and employees. If the epidemic is at an end, as appears to be the case now, it is presumable that this measure contributed to prevent its further spread.

With the co-operation of the State and city boards of health a thorough investigation was made, which showed that the disease was not due to infection through any article of food or drink, but that it probably spread by contact from a "walking" case, contracted outside the institution. The opportunity was utilized for the prosecution of research work on the epidemiology of typhoid and paratyphoid and laboratory study of cultures from the blood and dejecta. For collaboration with Dr. Canavan in this work we are indebted to Dr. E. T. F. Richards of the Harvard Medical School, as well as to Dr. Southard, pathologist to the State Board of Insanity, who gave valuable advice and helped to shape the inquiry.

In this connection it is gratifying to record that the research on diphtheria, authorized by the Board last year, has reached a stage where Dr. Morse, who has it in charge, thinks she can predict important practical results in the shape of a new diagnostic aid to distinguish true diphtheria from diphtheroid infections. A preliminary note by Dr. Morse will appear as an appendix with this report.

FATALITIES.

Two deaths by suicide and 2 from accident have to be reported. A woman patient, sixty-one years of age, suffering from melancholia, hanged herself with a towel in her room, on December 16, ten days after her admission to the hospital. A female epileptic died July 11 from asphyxiation, caused by the occurrence of a convulsion at the meal hour, food being drawn into the larynx. A patient in the men's department ran from the walking party and threw himself under a loaded wagon which was passing on the street, and was killed by a wheel crushing his neck. This occurred on September 13.

In the men's department a patient met his death, September 8, under circumstances which required and received a most rigid investigation. It was shown in an inquiry before the grand jury that he had made a violent assault upon an attendant, and a struggle ensued, both falling to the floor. The patient died in collapse a few hours later, and an autopsy by the medical examiner disclosed as the cause of death rupture of the inferior vena cava. Inasmuch as the attendant acted in self-defence, and exhibited a black eye and numerous abrasions on his face, while the patient's body presented externally only trifling marks of violence, the death was held to be due to unavoidable accident, and a "no bill" was reported. The attendant was, however, changed from ward duty to a position not involving the care of patients.

TEMPORARY CARE SERVICE.

The last Legislature passed a measure (chapter 307, Acts of 1910) which directed that suitable quarters be set apart at this hospital for the observation and temporary care, pending examination and commitment, of persons suffering from mental disorders who should come under the care of the police in the city of Boston. In compliance with this direction the Butler building, containing two wards, each with a capacity for 10 patients, was emptied by transfer of that number to other wards, and on May 1 was ready for the reception of these cases, — one ward for men and one for women.

This wise and humane provision for immediate beginning of

a portion of the service which the psychopathic hospital will render to the community has met an urgent need, and has been of incalculable benefit to a large number of sick persons who would otherwise have been, of necessity, confined in a police station or jail for a longer or shorter period, awaiting commitment and transfer. Under authority of the above enactment such patients are now brought directly to the hospital at any hour of the day or night, and receive at once the care and treatment their condition demands. With willing and intelligent co-operation on the part of the police department, this method has worked smoothly, and in only a few instances have we felt called upon to reject as unsuitable cases the patients who were presented. After an experience of seven months, covering the reception of nearly 200 cases, there can be no doubt that the prompt relief thus afforded operates to cut short incipient attacks, to moderate others and to shorten the period of treatment necessary in a large proportion, besides protecting the patients from needless suffering and distress.

Some statistics of this service are included in Table No. 1, to be found elsewhere in this report, but a more satisfactory review of its operations for the seven months to December 1 is presented in the following tabulation:—

	Males.	Females.	Totals.
Admissions from May 1 to Dec. 1, 1910,	115	83	198
Chapter 504, Acts of 1909, section 34,	—	1	1
Chapter 504, Acts of 1909, section 42,	4	4	8
Chapter 504, Acts of 1909, section 43,	3	3	6
Chapter 504, Acts of 1909, section 44,	5	11	16
Chapter 307, Acts of 1910,	103	64	167
Discharges from May 1 to Dec. 1, 1910,	113	79	192
Recovered,	22	8	30
Improved,	5	2	7
Unimproved,	2	—	2
Died,	—	2	2
Not insane,	3	8	11
Deported,	2	—	2
Committed to Boston State Hospital,	31	37	68
Committed to Danvers State Hospital,	23	10	33
Committed to Worcester State Hospital,	6	4	10
Committed to Westborough State Hospital,	9	4	13
Committed to Taunton State Hospital,	1	1	2
Committed to Monson State Hospital,	1	—	1
Committed to McLean Hospital,	1	—	1
Committed to Butler Hospital, Providence, R. I.,	1	—	1
Returned to Boston State Hospital,	1	—	1
Returned to Medfield State Asylum,	2	—	2
Returned to Worcester State Hospital,	2	1	3
Returned to Westborough State Hospital,	1	1	2
Returned to Monson State Hospital,	—	1	1
Patients remaining Dec. 1, 1910,	2	4	6

Provisional Diagnosis in Temporary Care Cases.

	Males.	Females.	Totals.
Admissions from May 1 to Dec. 1, 1910,	115	83	198
Senile psychoses,	3	3	6
General paralysis,	20	4	24
Cerebral thrombosis,	—	1	1
Cerebral concussion,	1	—	1
Alcoholic psychoses:—			
Pathological intoxication,	1	2	3
Delirium tremens,	5	2	7
Polyneuritic psychosis,	1	—	1
Acute hallucinosis,	20	10	30
Chronic delusional,	3	—	3
Chronic alcoholism,	1	—	1
Drug and toxic psychoses:—			
Morphinism,	1	—	1
Food toxicosis,	1	—	1
Involution melancholia,	4	2	6
Dementia præcox,	21	20	41
Paranoic conditions,	3	5	8
Manic-depressive psychosis:—			
Excitement,	13	17	30
Depression,	6	4	10
Epileptic psychoses,	2	1	3
Epilepsy,	3	2	5
Imbecility with insanity,	1	—	1
Constitutional inferiority,	2	—	2
Not insane,	3	9	12
Apoplexy,	—	1	1

MEDICAL SERVICE.

The following changes have occurred in the personnel of the medical staff:—

Dr. Samuel W. Crittenden was promoted to be assistant superintendent January 1. Dr. Stephen E. Vosburgh was appointed assistant physician April 1. Dr. Myrtelle M. Canavan was appointed pathologist October 1. Dr. Harry M. Nicholson was appointed junior assistant physician October 1. Dr. George H. Maxfield, first assistant physician, resigned November 15 to accept the position of surgeon to the Soldiers' Home in Chelsea, a well-deserved promotion. Dr. Arthur B. Moulton, formerly of the Northampton State Hospital staff, has been secured for temporary service until the vacancy caused by Dr. Maxfield's resignation shall be filled.

Regular staff meetings have been inaugurated for the presentation of cases for diagnosis, discussion of treatment, determination of the question of discharge, etc. A systematic record of the proceedings is kept, which proves extremely useful, especially in cases which are brought up for further discussion at a later meeting, as is often done.

The medical officers have had additional duties imposed upon them in consequence of the temporary care service, the inauguration of staff meetings, more extended case histories with preparation of abstracts for discussion of these, more lectures to the training school, and, latterly, the care of the nurses and other employees ill with typhoid fever. The lack of a pharmacist, too, makes necessary their performance of routine work which interferes with more important activities. The recent addition to the staff of a junior assistant physician has given needed assistance in the clinical work, and the opening of a well-equipped bacteriological and pathological laboratory toward the close of the year, with a skilled and enthusiastic worker in charge of this department, puts the medical work on a higher level, and, like the staff meetings, promotes keener interest and a progressive scientific spirit. That advantage is taken of the new facilities afforded by the laboratory is shown by the more frequent employment of diagnostic aids, such as blood examinations and lumbar puncture, also by the increased number of autopsies obtained; of these there have been 12 during the year, 5 of them in the past two months.

As a further aid to the medical staff, considerable additions have been made to the list of journals and reviews, and the medical library has had some needed accessions.

The services of a dentist, Dr. Howard A. Lane, have been secured for one forenoon each week, and this very essential part of the care and treatment of the patients is being well attended to.

NURSING SERVICE.

During the year an important measure discussed in the previous annual report — shortening the hours of duty — was put into effect, and, though the change entails an added expense of several thousands of dollars a year, the cost is more than repaid by the increased efficiency and the better spirit it has engendered in the corps. Each attendant and nurse under the existing arrangement has one full day off duty each week, and in addition has hours off daily, reducing the actual time on duty to sixty hours a week. If we can now supply these employees, upon whose capacity and devotion to duty the welfare of the

patients so directly depends, with more comfortable living quarters, well separated from the wards, all necessary requirements for the maintenance of a stable, efficient and loyal nursing force will have been met.

TRAINING SCHOOL.

The training school for nurses remains under the same efficient management as for some years past, and continues its important work with gratifying success. Some additions have been made to the curriculum and more definition given the schedule of work and study, but the most important change to be recorded is the extension of its privileges to the men attendants, several of whom have been induced to undertake the course. This very desirable extension of the school's usefulness was made possible, I think, by the gradual introduction of women nurses in the wards for male patients, where their influence prevails to stimulate the nursing spirit and give new interest to what is, under routine conditions, apt to be considered by the men as mere drudgery.

Another thing which has, I am sure, bettered the service in the men's department is the setting apart of a small ward for the reception and special care of new admissions. Not only has this made it possible to give the acute cases better attention, it has emphasized to the attendants the importance of the hospital feature, and demonstrated the need of special training, for which an awakened interest creates desire.

A special course of training has been instituted which is obligatory for those attendants who do not care to take the full course in the training school. This consists of a series of lectures and demonstrations covering the essentials of nursing, and in particular the care of the insane, with systematic instruction in practical duties in the wards.

OCCUPATION OF PATIENTS.

An earnest effort has been made to provide a variety of useful and stimulating occupation for the patients. A large party of men from the wards for the demented and untidy and disturbed classes has been engaged all the season in excavating,

grading, digging ditches, laying drain pipe, repairing roads, etc., accomplishing a creditable amount of work, and undergoing themselves an improvement in health, habits and mental condition which was very notable in some and sufficient to be gratifying in practically all. The farmer has had more patients for his work, and all other working departments have been kept well supplied. An upholsterer was employed and installed as shop foreman to develop a line of industries having as its nucleus mattress making, which has heretofore been conducted on a smaller scale. He has taught 3 patients to make mattresses; 6 or 8 prepare the hair; 1 repairs shoes; another helps to make cushions, cut and fit curtains, etc. It is hoped that we can now add to these activities broom and mat making, and then other industries as rapidly as they can be gotten under way. In the women's department the force of seamstresses has been augmented both in the sewing room and in the wards, and in addition an industrial room is filled with patients engaged in fancy work, basketry, making artificial flowers, etc., — employments which give them pleasure and afford mental stimulation of decided therapeutic value. Many of the women, too, had healthful outdoor work during the summer, as in previous years, gathering the fruits and vegetables daily from the garden.

ENTERTAINMENT OF PATIENTS.

In addition to the fortnightly dances from October to May, and occasional entertainments in the chapel, principally concerts, the women patients have enjoyed several picnics and a number of tea parties, card parties, ward musicales, etc., sleigh rides during the winter, and, during the summer, carriage and automobile rides.

The patients, both men and women, were assembled for a Christmas entertainment, consisting of a musical program, gaily decorated tree and a distribution of presents, provided in part by their friends and in part by the hospital.

On July 4 a band concert was given at each department, which was greatly enjoyed by the entire population. A graphophone was purchased and is kept in circulation, enlivening

each ward in turn. The men make constant use of three pool tables, and many devote themselves to cards and other games. More than one hundred books have been added to the patients' library, and a number of old volumes have been rebound. A generous list of magazines and illustrated weeklies is subscribed for, and these are distributed throughout the wards. A smoking and recreation room for patients is being fitted up in the basement of the men's department.

Thanksgiving was, as usual, observed with an appropriate feast.

REPAIRS AND IMPROVEMENTS.

Painting has gone steadily forward. At the women's department the C and E buildings were painted outside and inside, the bakery and kitchen inside, the sewing room and the front and back corridors, the office entrance, a corridor in Ward B and the laboratory. At the men's department the interior of the wards was completed, with the exception of Ward 5 rear, and the center corridor and general dining room, the connecting corridors to the wards, the kitchen and the attendants' and other employees' quarters in the third stories were painted, besides painting and whitewashing in the basements and some work in the farmhouse. At the barn the milk room received attention. The superintendent's house was painted outside and some interior work was done.

The wooden walk to Austin Street was relaid, largely with new material; a fence was built around the pond as a protection against patients jumping in; window openings were enlarged and two cement areas built to provide better light for the laboratory in the Stedman basement; tables and shelving were made and installed in these rooms and gas introduced from Harvard Street; the old barns were repaired; a shelter house for fire hose was constructed; additional bathtub, closet and washbowls put in nurses' quarters in E attic; a bath room was equipped at the farmhouse and hot-water heater installed in the basement; a new hot-water heater was put in the superintendent's house and the porch there was rebuilt.

A separate dining room for the men attendants was provided by structural alterations in quarters adjoining the patients'

dining room, a serving room for the officers' table was similarly contrived out of a storeroom, and the main serving room was improved with new cupboards and sink. In the kitchen at the men's department the floor drains were cleaned out, lined with cement and covered with iron plates, and the discharge pipes from the sink and other fixtures were suspended in them by rod hangers, remedying a very unsanitary condition there.

The engineer has continued the work of shortening and straightening returns and insulating pipes, effecting thereby a saving of several thousand dollars in the cost of coal for the year; and in addition his force has attended to many ordinary repairs, as have the other departments.

The New England Telephone and Telegraph Company installed a private branch exchange in the women's department, connecting with the men's department over a line of poles erected and owned by the hospital. This adds greatly to the ease and promptness of intercommunication, and facilitates the business of all who have occasion to telephone to the hospital. A better system of house phones is badly needed in both departments and should be provided next year.

FARM AND GROUNDS.

Excellent crops were obtained notwithstanding the dry season. The tables were abundantly supplied with vegetables, and we have stored 3,000 bushels of potatoes, besides quantities of turnips, beets, carrots, squash, pumpkins, cabbage and celery; also 200 tons of hay and 190 tons of ensilage for the stock.

The herd of cows was tested for tuberculosis by the State Cattle Bureau, and eleven animals found to be diseased were condemned and slaughtered. The cow stable was then thoroughly disinfected and whitewashed throughout; it is practically unfit for further use, however, and plans should be made for a new one as soon as possible.

A power sprayer was bought and energetic work continued against the gypsy and brown-tail moths, with excellent results, our trees showing little evidence of their activity at any time during the season. The expense of this item for the year, including the sprayer, did not exceed the sum spent the previous

year, when it was done by a contractor; and next year it will, of course, be much less. Much has been done to improve the appearance of the grounds. The old house and barns on the Callahan property, acquired last year, were torn down, the whole lot cleaned up and put under cultivation, and a dilapidated stone wall separating it from the hospital lawn removed. Several lines of farm fencing should be put up next year, and a beginning, at least, should be made on a suitable boundary wall or fence, for which a design has been adopted by the Board. This it is expected can be done by our regular mason at a very moderate cost, suitable stone being at hand.

The sewer division of the city street department is completing the work begun last year of deepening and widening the brook channel through the hospital property, which will render possible the effective drainage of our lowland and bring a large area of marsh under cultivation. The farmer has men and teams at work now clearing this land and laying drains.

MAINTENANCE EXPENSES.

The amount expended for maintenance was \$213,544.77, which, divided by the daily average number of patients, 827.93, makes the weekly per capita cost \$4.946. Receipts for board of private patients were \$18,896.21; from reimbursing patients, \$6,574.23; from sales and other sources, \$2,246.59, making the total income \$27,717.03.

Deducting receipts from gross expenses, the net cost of maintenance was \$185,827.74, which, divided by the above average number of patients, gives a net weekly per capita cost of \$4.302.

The gross expenses exceeded those of the previous year by \$21,564.02, which was in accordance with the estimates, and for which an explanation was furnished in last year's report.

For the coming year the expense of maintenance is estimated at \$223,600. This is an increase of \$10,050, which is due to the following causes: 26 more patients to be cared for; additional officers and employees, to meet the greater demands of improved service under conditions of shorter working hours; the temporary care service, pending completion of the psycho-

pathic hospital; maintenance of the sixty-hour-a-week schedule for employees a full year instead of six to eight months, the period for which it was in operation the current year.

ALTERATIONS, ADDITIONAL BUILDINGS AND EQUIPMENT.

One of the earliest recommendations made by the Board of Trustees related to the need of certain structural alterations in the ward buildings at the men's department, to utilize waste space and convert gloomy and ill-ventilated sections into cheerful, well-lighted quarters for patients. This can easily be done, and while providing additional accommodations at a very low per capita cost, the appearance of the wards will be greatly improved.

In order to do away with the expense of maintaining two electric light and power plants, and to provide for the extension of lighting current to projected new buildings, it is considered essential that a change be made eventually from the direct current to the alternating system. As a step in that direction, and as the wisest measure to provide for immediate needs, a plan is presented for the installation of two alternating current generators and a small motor generator set, with the necessary transformers and wire connections. This has been worked out, with your approval, after careful consideration, and on the advice of competent engineers who have studied our problem.

The present bakery will be totally inadequate to supply the institution when increased by the completion of the infirmary group and the psychopathic hospital, now under construction. Our facilities for cold storage of food stuffs are practically *nil*; the ice from the pond is unfit for use in drinking water; we have cramped and inconvenient quarters for general stores in the basement of an old wooden building which should soon be torn down to give place to a modern ward building. To provide these needs your directions have been followed in the preparation of plans for a service building to contain a bakery, a cold-storage and ice-making plant, and general stores, with basement bins for the storage of vegetables.

A home for men attendants is a most urgent need which has already been referred to. The projected farmstead group

should be begun by the erection of two dormitories and a service building, the latter to contain the patients' baths, sitting room and dining room, together with dining room and sleeping quarters for employees.

It is regretted that plans for a new cow barn, which is badly needed, could not be prepared in time for presentation this year.

Your Board has approved plans, specifications and estimates for the above items, and these have been presented to the Auditor of the Commonwealth for submission to the Governor and Council and to the Legislature, with your petition for appropriations as follows:—

Alterations in south dormitory building, men's department,	\$6,000
Home for male attendants and nurses,	22,000
Farm group, comprising central service building, two dormitory buildings and heating plant,	83,000
Service building, comprising general stores, cold storage and bakery,	42,000
Addition to electric light and power plant,	13,875
<hr/>	
Total,	\$166,875

Grateful acknowledgment is made of the kindness of friends who have donated their services for the entertainment of patients; namely, to Dr. Dixwell and his associates of the Hospital Music Association and to the Dorchester Woman's Club; also to our officers and employees who have exerted their talents to the same end. Magazines and other reading matter for the wards, most acceptable gifts, have been received through the kindness of Mr. and Mrs. Frank F. Stone, Dr. Walter Channing and the Hospital Newspaper Society. Religious services have been regularly conducted by Rev. Father McCafferty and Rev. Charles S. Otto, to whom our thanks are due for their ministrations.

For myself, I cannot express the gratitude I feel for the loyal co-operation of the officers and employees, whose faithful performance of duty and cheerful spirit have at all times

lightened the load of administration and helped in overcoming difficulties; while to you I am indebted for ready appreciation of my efforts and uniform support and encouragement, as well as for wise counsel and direction.

Respectfully submitted,

HENRY P. FROST,
Superintendent.

Nov. 30, 1910.

REPORT OF THE DIPHTHERIA INVESTIGATION FOR THE BOSTON STATE HOSPITAL.

The diphtheria epidemic at the Boston State Hospital during the spring and summer of 1909 suggested several lines of work upon bacillus diphtheriæ and diphtheroid organisms. The investigation, which was undertaken at the instance of Dr. E. E. Southard, has been pursued intermittently from July, 1909, to the present time. Its scope has enlarged as interesting and important problems have suggested themselves in the course of the work.

The main problem at the present time is the study of the group of diphtheria bacilli by the biometrical or statistical method. This method, which, briefly stated, involves the comparative study of a large number of cultures,¹ has recently been applied with great success to the coccaceæ,¹ and has enabled a natural classification of the numerous members of this family to be made. It is expected that this method will prove of equal value when applied to the diphtheria bacillus to determine whether or not divisions or subfamilies exist within the group, and also the relationship, so called, of the "pseudo-diphtheria" and "diphtheroid" bacilli to the true Klebs-Loeffler organism. The latter question, which is one of the perennial discussions in bacteriology, can be decided with certainty by this method.

One hundred and twenty-one strains of diphtheria and diphtheroid bacilli have been studied. These have been obtained from the Boston State Hospital, the Danvers Hospital and from other sources, through the courtesy of various individuals, among whom may be especially mentioned Dr. B. L. Arms and Miss E. Marion Wade of the bacteriological laboratory of the Boston Board of Health.

¹ "The Systematic Relationship of the Coccaceæ," by C. E. A. Winslow and Ann Rogers Winslow, 1908.

The plan of work has been to determine what are the characteristics of most value in the identification of the diphtheria bacillus, and then to study the selected characteristics by exact and comparable methods in a long series of cultures.

The tests which have been found most suitable, and to which each strain has been, or is to be, subjected, are: —

(1) Morphology, including the development of involution forms and of Neisser's granules. The peculiarities of shape and the early development of polar granules and involution forms are very distinctive features of the true diphtheria bacillus, which, however, may be more or less closely imitated by the pseudo-diphtheria and diphtheroid organisms.

(2) Vigor of growth and longevity of the organisms in cultures. The more strictly parasitic an organism the scantier is its growth, as a rule, and the shorter its life in cultures.

(3) Chromogenesis. Many diphtheroids and some true diphtheria bacilli form pigment.

(4) Virulence, determined by inoculation into guinea pigs. The Klebs-Loeffler bacillus, when freshly isolated from clinical cases of diphtheria, usually proves virulent (*i.e.*, kills the guinea pig within three days when injected in suitable doses), but numerous nonvirulent strains also exist. The diphtheroids are almost without exception nonvirulent.

(5) The quantitative determination, by titration, of acid-production by these organisms in dextrose, lactose, mannite, saccharose and dextrin broth. Of these, only dextrose and saccharose have given uniform results; the reactions with the other carbohydrates are too variable to be of value. It may be advisable later to try the fermentative powers with other substances.

(6) Toxin production. The formation of a toxin capable of being neutralized by diphtheria antitoxin is par excellence a distinctive characteristic of the true Klebs-Loeffler bacillus, separating it from superficially similar organisms. The testing of each organism for toxin production is, however, very laborious and expensive, involving, as it does, animal experimentation in each case. In a number of trials which we have made we have found no toxin formation by pseudos or diphtheroids.

(7) Serum reactions. These are considered by some inves-

tigators to be the most delicate of all means of determining the relationship of bacteria. In this work only agglutination has been tried up to the present time, but it is planned to test later the fixation of complement and the con-agglutination reaction. The results of the agglutination tests have been quite satisfactory, in spite of technical difficulties in getting homogeneous suspensions of diphtheria bacilli. True diphtheria bacilli have given positive reactions (by the macroscopic method) in high dilutions ($\frac{1}{2200}$) of serum from a rabbit immunized against *B. diphtheriæ*, while pseudo and diphtheroid organisms show no clumping, even in low dilutions. It is possible that the agglutination test with anti-diphtheritic serum may prove to be a diagnostic procedure of some importance by furnishing a quick and easy way of distinguishing the true Klebs-Loeffler bacillus.

The data already accumulated have been analyzed statistically and the results plotted. The organisms seem already to be grouping themselves, but the number of strains thus far investigated is so small that it would be premature to announce results at this time.

Recently, as a side issue, some work has been started, at the suggestion of Dr. Walter R. Brinckerhoff of the Harvard Medical School, on the restoration of virulence of cultures of *B. diphtheriæ*, which have spontaneously become attenuated, by growing them with amebæ.

It was hoped during this work to investigate a diphtheroid organism called by Ford Robertson of Edinburgh *B. paralyticans*, and claimed by him to be of importance in the etiology of general paresis. As yet no opportunity to do this has presented itself, but the question of diphtheroid organisms in general in insane hospitals is a matter of importance and should be investigated.

During the coming winter it is hoped to continue the work by adding to the number of strains studied in the routine manner, and especially to investigate the immunity reactions of the group. It is expected that by the end of another six months results of value may be ready to publish.

M. E. MORSE.

SUPERINTENDENT OF NURSES' REPORT.

To the Superintendent of the Boston State Hospital.

The eleventh annual report of the Training School for Nurses is herewith respectfully submitted:—

Graduating Class of 1910.

Christine A. Johnston.	Ellen B. McMullin.
Jessie G. Bruce.	Mary B. MacDonald.

Nursing Staff.

Superintendent of nurses,	1
Assistant superintendent of nurses (graduate),	1
Supervisors, day (graduates),	3
Supervisor, night (graduate),	1
Head nurses (graduates),	5
Head nurses (pupils),	8
Night nurses (pupils),	8
Night nurses (attendants),	5
Pupils, day,	22
Probationers,	10
Attendants,	17
Applications during the year,	353
Applications accepted,	86
Probationers accepted,	23
Pupils left,	7
Probationers rejected,	24

The training school has graduated 4 nurses during the year, making a total of 68 nurses since it was organized. Seventeen of our graduates have resigned during the year, 11 of whom have entered a general hospital for a post-graduate course, 5 are doing private nursing and 1 resigned on account of ill health.

Owing to the change to ten-hour service on the wards, we

VALUATION.

Nov. 30, 1910.

Buildings and 153 acres land taken from the city of Boston Dec. 1, 1908, . . .	\$1,000,000 00	
79 acres land taken Oct. 1, 1909, assessed for,	62,710 00	
2 $\frac{1}{2}$ acres land purchased Nov. 3, 1909, for psychopathic hospital,	75,919 20	
Amount paid on new buildings and additions: —		
Infirmary,	14,726 98	
Laundry,	6,139 42	
Butler,	4,211 73	
	<hr/>	\$1,163,707 33
Provisions and groceries,	\$4,391 72	
Clothing and clothing materials,	10,711 83	
Furnishings,	47,514 05	
Heat, light and power: —		
Fuel,	1,680 48	
Repairs and improvements: —		
Machinery and mechanical fixtures,	20,620 00	
All other property,	4,773 34	
Farm, stable and grounds: —		
Live stock on farm,	8,078 60	
Produce of farm on hand,	7,865 05	
Carriages and agricultural implements,	4,586 15	
All other property,	1,868 74	
Miscellaneous,	2,412 32	
	<hr/>	112,502 28
		<hr/>
		\$1,276,209 61

TREASURER'S REPORT.

To the Trustees of the Boston State Hospital.

I respectfully submit the following report of the finances of this institution for the fiscal year ending November 30, 1910:—

CASH ACCOUNT.

Balance Dec. 1, 1909,	\$982 79
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*Receipts.**Institution Receipts.*

Board of inmates:—

Private,	\$18,896 21	
Reimbursements,	6,574 23	
		\$25,470 44

Salaries, wages and labor:—

Wages not called for,	4 93
-----------------------	------

Sales:—

Food,	\$775 30	
Clothing and materials,	65 45	
Furnishings,	27 36	
Heat, light and power,	1 05	
Repairs and improvements,	88 71	
Miscellaneous,	3 19	
		961 06

Farm, stable and grounds:—

Cows and calves,	\$532 69	
Pigs and hogs,	334 78	
Hides,	17 50	
Sundries,	7 79	
		892 76

Miscellaneous receipts:—

Interest on bank balances,	\$169 75	
Rent,	177 00	
Sundries,	41 09	
		387 84

27,717 03

Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Balance of 1909,	\$7,666 41
Advance money (amount on hand November 30),	15,000 00
Approved schedules of 1910,	191,340 52
	214,006 93

Special appropriations,	34,498 73
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Total,	\$277,205 48
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Payments.

To treasury of Commonwealth, institution receipts,	\$27,717 03	
Maintenance appropriations: —		
Balance November schedule, 1909,	8,649 20	
Eleven months' schedules, 1910,	191,340 52	
November advances,	11,091 52	
	<hr/>	\$238,798 27
Special appropriations: —		
Approved schedules,		34,498 73
Balance Nov. 30, 1910: —		
In bank,	\$3,524 67	
In office,	383 81	
	<hr/>	3,908 48
Total,		<hr/> \$277,205 48

MAINTENANCE.

Appropriation,	\$213,550 00
Expenses (as analyzed below),	213,544 77
	<hr/>
Balance reverting to treasury of Commonwealth,	\$5 23

Analysis of Expenses.

Salaries, wages and labor: —	
General administration,	\$29,433 16
Medical service,	9,063 50
Ward service (male),	15,340 10
Ward service (female),	22,546 58
Repairs and improvements,	7,060 02
Farm, stable and grounds,	8,951 88
	<hr/>
	\$92,395 24
Food: —	
Butter,	\$3,234 99
Butterine,	3,155 49
Beans,	694 53
Bread and crackers,	192 76
Cereals, rice, meal, etc.,	905 31
Cheese,	678 73
Eggs,	4,393 94
Flour,	5,974 40
Fish,	1,826 11
Fruit (dried and fresh),	1,610 66
Meats,	12,845 87
Milk,	24 24
Molasses and syrup,	189 28
Sugar,	4,322 08
Tea, coffee, broma and cocoa,	1,976 72
Vegetables,	526 56
Sundries,	2,278 02
	<hr/>
	44,829 69
Amount carried forward,	<hr/> \$137,224 93

Amount brought forward, \$137,224 93

Clothing and materials: —

Boots, shoes and rubbers,	\$1,486 11
Clothing,	3,917 02
Dry goods for clothing and small wares,	2,064 85
Furnishing goods,	264 86
Hats and caps,	97 82
Leather and shoe findings,	33 39
Sundries,	50

7,864 55

Furnishings: —

Beds, bedding, table linen, etc.,	\$9,396 77
Brushes, brooms,	381 94
Carpets, rugs, etc.,	925 30
Crockery, glassware, cutlery, etc.,	1,239 86
Furniture and upholstery,	2,760 25
Kitchen furnishings,	961 47
Wooden ware, buckets, pails, etc.,	160 71
Sundries,	2,075 05

17,901 35

Heat, light and power: —

Coal,	\$13,761 36
Oil,	17 43
Sundries,	470 24

14,249 03

Repairs and improvements: —

Brick,	\$69 01
Cement, lime and plaster,	235 34
Doors, sashes, etc.,	157 44
Electrical work and supplies,	676 25
Hardware,	624 94
Lumber,	901 16
Machinery, etc.,	204 68
Paints, oil, glass, etc.,	2,142 46
Plumbing, steam fitting and supplies,	2,043 25
Roofing and materials,	20 87
Sundries,	503 38

7,578 78

Farm, stable and grounds: —

Blacksmith and supplies,	\$610 07
Carriages, wagons, etc., and repairs,	1,211 39
Fertilizers, vines, seeds, etc.,	609 68
Hay, grain, etc.,	5,104 10
Harnesses and repairs,	289 22
Horses,	775 00
Cows,	1,199 50
Other live stock,	139 00
Tools, farm machines, etc.,	1,379 20
Sundries,	2,455 78

13,772 94

Amount carried forward, \$198,591 58

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
For the purpose of establishing in the city of Boston a hospital for the first care and observation of mental patients and the treatment of acute and curable mental diseases,	Acts 1909, chap. 470,	\$600,000 00	\$9,420 60	\$90,446 52	\$509,553 48
Butler building addition,	Acts 1910, chap. 644,	39,000 00	4,211 73	4,211 73	34,788 27
Infirmary,	Acts 1910, chap. 644,	275,000 00	14,726 98	14,726 98	260,273 02
Laundry,	Acts 1910, chap. 644,	44,000 00	6,139 42	6,139 42	37,860 58
		\$958,000 00	\$34,498 73	\$115,524 65	\$842,475 35

Respectfully submitted,

WILLIAM E. ELTON,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE BOSTON STATE HOSPITAL.

Superintendent (per year),	\$3,000 00
Assistant superintendent (per year),	1,800 00
First assistant physician (per year),	1,500 00
Assistant physician (per year),	1,000 00
Assistant physician (per year),	1,000 00
Assistant physician (per year),	900 00
Junior assistant physician (per year),	600 00
Pathologist (per year),	1,000 00
Treasurer and steward (per year),	1,800 00
Chief engineer (per year),	1,440 00
Farmer (per year),	1,200 00
Assistant farmers (2) (per month),	\$35 00 to 45 00
Gardener (per month),	45 00
Matron (per month),	40 00
Superintendent of nurses (per year),	800 00
Assistant superintendent of nurses (per month),	45 00
Stenographers (4) (per month),	\$30 00 to 78 00
Clerk (per month),	50 00
Office attendants (2) (per month),	\$20 00 and 30 00
Telephone operators (2) (per month),	\$20 00 and 30 00
Seamstresses (2) (per month),	30 00
Laundryman (per month),	40 00
Laundry teamster (per month),	30 00
Laundress (per month),	40 00
Laundresses (8) (per week),	\$4 00 to 5 00
Baker (per month),	60 00
Storekeeper (per month),	50 00
Supervisor (man) (per month),	55 00
Supervisors (women, 4), (per month),	35 00
Assistant supervisors (men, 2), (per month),	\$35 00 and 45 00
Attendants (men, 52), (per month),	\$25 00 to 40 00
Nurses and attendants (women, 75), (per month),	\$20 00 to 30 00
Night watchmen (2) (per month),	\$35 00 and 50 00
Cooks (men, 2) (per month),	\$55 00 and 70 00
Cooks (women, 3) (per month),	25 00
Assistant cook (man) (per month),	40 00

Table girls (6) (per week),	\$4 00
Chambermaid (per week),	4 00
Kitchen girl (per week),	4 00
Painter (per week),	17 55
Assistant painters (3) (per week),	15 00
Carpenters (2) (per week),	17 55
Assistant carpenters (2) (per week),	15 00
Upholsterer (per week),	12 00
Assistant engineers (7) (per week),	21 00
Assistant engineer, with board and lodging (per week),	17 55
Firemen (4) (per week),	17 50
Stablemen (2) (per week),	\$6 90 and 10 05
Expressman (per week),	12 40
Herdsmen (per month),	45 00
Porters (2) (per month),	30 00
Mason (per month),	80 00
Teamsters (4) (per month),	\$28 00 and 30 00
Farm hands (7) (per month),	30 00
Poultryman (per month),	20 00

PRODUCTS OF THE FARM AND GARDEN.

GARDEN PRODUCTS.

Asparagus, 8 boxes,	\$36 00
Beans, shell, 21 bushels,	26 25
Beans, string, 182 bushels,	136 50
Beets, 165 bushels,	99 00
Beets, 47 bunches,	2 35
Beet greens, 210 bushels,	73 50
Cabbage, 6,750 heads,	270 00
Carrots, 164 bushels,	98 40
Cauliflower, 50 boxes,	50 00
Celery, 130 boxes,	130 00
Corn, green, 862 bushels,	646 50
Cucumbers, 3 boxes,	4 50
Dandelions, 6 bushels,	4 50
Egg plant, 1 barrel,	2 50
Kale, 37 bushels,	11 10
Kohl-rabi, 15 bushels,	7 50
Lettuce, 451 boxes,	338 25
Mangel-wurzel, 400 bushels,	100 00
Onions, 31 bushels,	26 35
Parsley, 6 bushels,	3 00
Parsnips, 108½ bushels,	108 50
Peas, 46¼ bushels,	46 25
Pepper grass, 22 bunches,	44
Peppers, 2 bushels,	1 50
Potatoes, 3,133 bushels,	2,193 10
Potatoes, small, 120 bushels,	18 00
Pumpkins, 1,178 pounds,	35 34
Radishes, 220 dozen,	55 00
Rhubarb, 6,360 pounds,	127 20
Spinach, 174½ bushels,	69 80
Squash, winter, 160 barrels,	240 00
Squash, summer, 6 barrels,	6 00
Scullions, 3¼ bushels,	2 44
Tomatoes, ripe, 758 bushels,	568 50
Tomatoes, green, 61½ bushels,	30 75
Turnips, white, 256 barrels,	320 00
Turnips, ruta-baga, 136 barrels,	170 00

Apples, 91 barrels,	\$273 00
Currants, 629 boxes,	69 19
Pears, 23 bushels,	40 25
Plums, 180 boxes,	54 00
Raspberries, 53 boxes,	10 60
Strawberries, 2,225 boxes,	222 50
Cherries, 26 boxes,	2 60
<hr/>	
Total,	\$6,731 16

FARM PRODUCTS.

Ensilage, 200 tons,	\$1,000 00
Fodder, green, cabbage, 22 tons,	110 00
Fodder, green, corn, 30 tons,	150 00
Fodder, green, clover and alfalfa, 164 tons,	1,148 00
Fodder, green, millet, 30 tons,	150 00
Fodder, green, oats, barley and peas, 58 tons,	290 00
Fodder, green, rye, 25 tons,	125 00
Hay, English, 224 tons,	4,704 00
Hay, meadow, 26 tons,	260 00
Rye straw, 2 tons,	48 00
Rowen, 4 tons,	48 00
Beef, 3,821 pounds,	267 47
Milk, 191,409 quarts,	11,484 54
Pork, 18,469 pounds,	1,846 90
Ice, 800 tons,	2,400 00
Sale of condemned cows, hides, calves and tallow,	554 19
Sale of condemned hogs, pork trimmings, etc.,	334 78
<hr/>	
Total,	\$24,920 88
Garden products,	\$6,731 16
Farm products,	24,920 88
<hr/>	
Total,	\$31,652 04

STATISTICAL TABLES.

[FORM PRESCRIBED BY STATE BOARD OF INSANITY.]

1. — General Statistics of the Year.

	INSANE.			VOLUNTARY, NOT INSANE.			TEMPORARY CARE.			AGGREGATES.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients in the hospital Sept. 30, 1909, Viz.: regularly committed,	332	458	790	-	-	-	-	-	-	332	458	790
emergency,	-	-	-	-	-	-	-	-	-	-	-	-
voluntary,	-	-	-	-	-	-	-	-	-	-	-	-
temporary care,	-	-	-	-	-	-	-	-	-	-	-	-
Admitted within the year, Viz.: by regular commitment,	188	299	487	1	1	1	70	39	109	259	338	597
emergency,	157	237	394	-	-	-	-	-	-	157	237	394
voluntary,	4	4	4	-	-	-	-	-	-	4	4	4
temporary care,	4	5	9	1	1	1	70	39	109	5	5	10
viz.: observation,	-	-	-	-	-	-	3	-	-	3	-	-
others,	-	-	-	-	-	-	67	37	104	2	2	5
by transfer,	2	11	13	-	-	-	-	-	-	2	11	13
from visit,	2	7	9	-	-	-	-	-	-	2	7	9
from escape,	3	3	3	-	-	-	-	-	-	3	3	3
Nominal admissions for discharge,	20	35	55	-	-	-	-	-	-	20	35	55
Viz.: from visit,	19	35	54	-	-	-	-	-	-	19	35	54
from escape,	1	1	1	-	-	-	-	-	-	1	1	1
Whole number of cases within the year,	520	757	1,277	1	1	1	70	39	109	501	796	1,387
Dismissed within the year,	144	282	426	1	1	1	62	37	99	207	319	526
Viz.: discharged,	139	94	139	1	1	1	62	35	97	207	319	526
as recovered,	45	45	90	-	-	-	15	7	22	108	129	237
as capable of self-support,	14	29	43	-	-	-	15	7	22	29	36	65
as improved,	11	18	29	-	-	-	7	1	8	11	18	29
as not improved,	17	36	53	-	-	-	7	1	8	24	37	61
as not insane,	3	20	23	-	-	-	34	19	53	37	39	76
died,	-	2	2	1	1	1	6	8	14	7	10	17
transferred,	67	86	153	-	-	-	-	2	2	67	88	155
escaped,	2	44	46	-	-	-	-	2	-	2	44	46
on visit October 1,	2	4	4	-	-	-	-	2	-	2	4	4
Nominal dismissals for commitment,	28	56	84	-	-	-	-	28	-	28	56	84

2. — *Insane received on First and Subsequent Commitments.*

NUMBER OF COMMITMENT.	CASES COMMITTED.		
	Males.	Females.	Totals.
First to this hospital,	147	203	350
Second to this hospital,	10	26	36
Third to this hospital,	1	5	6
Fourth to this hospital,	1	7	8
Fifth to this hospital,	—	5	5
Sixth to this hospital,	1	—	1
Ninth to this hospital,	1	—	1
Total cases,	161	246	407
Total persons,	161	244	405
Never before in any hospital for insane,	139	191	330

3. — *Nativity and Parentage of Insane Persons first admitted to Any Hospital.*

PLACE OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
Massachusetts,	58	15	18	64	16	16	122	31	34
Other New England States,	8	7	8	14	11	13	22	18	21
Other states,	8	4	3	12	10	9	20	14	12
Total native,	74	26	29	90	37	38	164	63	67
Other countries: —									
Armenia,	—	—	—	1	—	—	1	—	—
Austria,	1	1	—	1	1	1	2	2	1
Canada,	11	11	17	13	15	19	24	26	36
England,	4	4	6	3	5	6	7	9	12
France,	—	—	—	—	1	1	—	1	1
Germany,	5	10	10	5	8	7	10	18	17
Greece,	—	—	—	—	1	1	—	1	1
Holland,	—	1	—	—	—	—	—	1	—
Hungary,	—	—	—	1	1	1	1	1	1
India,	—	—	—	1	1	1	1	1	1
Isle of Malta,	—	—	—	1	—	—	1	—	—
Ireland,	28	68	60	54	89	86	82	157	146
Italy,	4	4	4	6	9	9	10	13	13
Norway,	—	1	—	1	1	1	1	2	1
Poland,	—	—	—	1	1	1	1	1	1
Portugal,	—	—	—	1	2	1	1	2	1
Roumania,	1	1	1	—	—	—	1	1	1
Russia,	2	2	2	5	9	9	7	11	11
Scotland,	4	2	2	2	3	1	6	5	3
Spain,	—	1	1	1	1	1	1	2	2
Sweden,	3	3	3	3	3	3	6	6	6
Turkey,	1	1	1	1	1	1	2	2	2
Wales,	1	1	1	—	—	—	1	1	1
Total foreign,	65	111	108	101	152	150	166	263	258
Total native,	74	26	29	90	37	38	164	63	67
Unknown,	—	2	2	—	2	3	—	4	5
Totals,	139	139	139	191	191	191	330	330	330

4. — *Residence of Insane Persons admitted from the Community.*

PLACES.	FIRST ADMITTED TO ANY HOSPITAL.			OTHER ADMISSIONS.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Massachusetts: —									
Suffolk County,	134	183	317	22	51	73	156	234	390
Essex County,	—	1	1	—	—	—	—	1	1
Middlesex County,	2	1	3	—	—	—	2	1	3
Hampshire County,	—	1	1	—	—	—	—	1	1
Norfolk County,	—	1	1	—	—	—	—	1	1
Total resident,	136	187	323	22	51	73	158	238	396
Poland,	—	1	1	—	—	—	—	1	1
Canada,	2	—	2	—	—	—	2	—	2
District of Columbia,	—	1	1	—	—	—	—	1	1
England,	1	—	1	—	—	—	1	—	1
New York,	—	—	—	—	2	2	—	2	2
Connecticut,	—	1	1	—	—	—	—	1	1
Italy,	—	1	1	—	—	—	—	1	1
Total nonresident,	3	4	7	—	2	2	3	6	9
Cities or towns 10,000 or over,	137	189	326	22	53	75	159	242	401
Country districts under 10,000,	2	2	4	—	—	—	2	2	4
Totals,	139	191	330	22	55	77	164	250	414

5. — *Civil Condition of Insane Persons first admitted to Any Hospital.*

	Males.	Females.	Totals.
Unmarried,	55	72	127
Married,	64	75	139
Widowed,	20	42	62
Divorced,	—	2	2
Totals,	139	191	330

6. — *Occupation of Insane Persons first admitted to Any Hospital.*

MALES.

Acrobat,	1	Manager,	1
Artist,	1	Milk dealer,	1
Authors,	2	None,	27
Baker,	1	Painters,	3
Barbers,	2	Peddler,	1
Bartenders,	5	Physician,	1
Cabinet-maker,	1	Printers,	3
Carpenters,	3	Salesmen,	8
Cigar-makers,	3	Shoemaker,	1
Clerks,	8	Steam-fitter,	1
Compositor,	1	Stenographer,	1
Draughtsman,	1	Students,	2
Electricians,	2	Surveyor,	1
Fireman,	1	Tailor,	1
Foreman,	1	Teacher,	1
Laborers,	37	Teamsters,	9
Lawyers,	2		
Letter carriers,	2		139
Machinists,	3		

FEMALES.

Actresses,	2	None,	40
Bookkeeper,	1	Nurses,	2
Candy-makers,	2	Opera singer,	1
Cigar-maker,	1	Saleslady,	1
Clerks,	5	Seamstress,	1
Cooks,	3	Student,	1
Domestics,	14	Tailoresses,	3
Dressmakers,	2	Teacher, school,	1
Factory girls,	3	Waitress,	1
Housework,	100		
Laundresses,	5		191
Music teachers,	2		

7. — *Ages of Insane at First Attack, Admission and Death.*

	FIRST ADMITTED TO ANY HOSPITAL.						DIED.		
	AT FIRST ATTACK.			WHEN ADMITTED.			AT FIRST ATTACK.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Congenital,	6	5	11	—	—	—	1	—	—
15 years or less,	—	—	—	—	—	—	—	—	—
From 15 to 20 years,	3	8	11	2	8	10	—	—	—
20 to 25 years,	7	12	19	7	13	20	—	1	1
25 to 30 years,	4	27	31	8	25	33	—	—	—
30 to 35 years,	17	20	37	17	20	37	—	—	—
35 to 40 years,	21	17	38	20	17	37	5	—	3
40 to 50 years,	41	34	75	37	37	74	9	3	6
50 to 60 years,	10	21	31	17	21	38	15	4	10
60 to 70 years,	20	19	39	17	23	40	13	7	23
70 to 80 years,	7	20	27	10	19	29	12	11	25
Over 80 years,	3	5	8	4	8	12	8	20	33
Totals,	139	188	327	139	191	330	67	86	153
Unknown,	—	3	3	—	—	—	—	—	—
Total of persons,	139	191	330	139	191	330	67	86	153
Mean known ages (in years),	46.27	43.35	44.81	47.02	45.33	46.17	54.42	61.65	59.80

9. — *Probable Duration of Mental Disease before Admission.*

PREVIOUS DURATION.	FIRST ADMITTED TO ANY HOSPITAL.		
	Males.	Females.	Totals.
Congenital,	6	5	11
Less than 1 month,	36	27	63
From 1 to 3 months,	24	39	63
3 to 6 months,	13	21	34
6 to 12 months,	13	29	42
1 to 2 years,	10	22	32
2 to 5 years,	19	32	51
5 to 10 years,	5	10	15
10 to 20 years,	1	2	3
Totals,	127	187	314
Unknown,	12	4	16
Totals,	139	191	330
Average known duration (in years), . . .	1.11	1.20	1.15

10. — *Form of Mental Disease in Patients admitted from the Community or discharged, with their Condition on Discharge, or died*
— Concluded.

FORM OF DISEASE.	COMMITTED.			DISCHARGED.										DIED.			AGGREGATES.							
	Males.	Females.	Totals.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			NOT INSANE.			Totals.	Males.	Females.			
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.									
B. — Other admissions: —																								
Manic-depressive insanity,	11	35	46	4	11	15	2	—	2	—	4	3	4	—	—	—	—	—	—	—	—	—	—	—
Dementia præcox,	3	15	18	—	—	—	—	—	—	—	7	10	—	—	—	—	—	—	—	—	—	—	—	—
Dementia, organic,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Involution psychosis: —																								
Melancholia,	1	3	4	—	—	—	—	1	1	—	4	4	—	—	—	—	—	—	—	—	—	—	—	—
Senile dementia,	1	1	2	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
General paresis,	2	1	3	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alcoholic psychoses, acute,	1	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alcoholic psychoses, chronic,	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Imbecility,	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Epileptic insanity,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paranoia,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals,	22	55	77	5	11	16	2	1	3	4	16	20	—	7	7	—	—	—	—	—	—	—	—	—
Aggregate cases,	161	246	407	14	29	43	11	7	18	17	36	53	3	20	23	—	—	—	—	—	—	—	—	—
Aggregate persons,	161	244	405	14	29	43	11	7	18	17	36	53	3	20	23	—	—	—	—	—	—	—	—	—

11. — Discharges of the Insane classified by Admission and Result.

NUMBER OF THE ADMISSION.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			NOT INSANE.			DIED.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
First,	12	21	33	9	6	15	15	24	39	3	16	19	1	2	3	61	81	142	101	150	251
Second,	1	4	5	—	1	1	2	7	9	—	3	3	—	—	—	5	4	9	8	19	27
Third,	1	1	2	—	—	—	—	3	3	—	—	—	—	—	—	1	1	2	2	5	7
Fourth,	—	2	2	—	—	—	—	1	1	—	1	1	—	—	—	—	—	—	—	4	4
Fifth,	—	1	1	1	—	1	—	1	1	—	—	—	—	—	—	—	—	—	1	2	3
Ninth,	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Totals,	14	29	43	11	7	18	17	36	53	3	20	23	1	2	3	67	86	153	113	180	293
First admissions to any hospital,	9	18	27	9	6	15	13	20	33	3	13	16	1	2	3	59	74	133	94	133	227

	11	6	5	11	1	1	1	1	2	6	8	10	4	14	2	1	1
Cerebral hemorrhage,																	
Endocarditis,	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organic heart disease,	18	12	6	-	-	-	-	-	-	-	-	1	2	3	-	-	-
Rupture of the inferior vena cava,	1	-	1	-	-	-	-	1	-	-	1	-	-	-	-	-	-
Respiratory system: —																	
Broncho-pneumonia,	23	18	5	-	1	1	-	-	-	-	-	2	-	2	-	-	-
Empyæma,	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hypostatic pneumonia,	9	6	3	-	1	1	-	-	-	-	-	1	-	1	-	-	-
Lobar pneumonia,	6	6	-	-	2	2	-	1	-	1	1	-	-	-	-	-	-
Pulmonary œdema,	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulmonary tuberculosis,	7	6	1	-	-	-	-	4	4	4	4	-	-	-	-	-	-
Pulmonary gangrene,	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Digestive system: —																	
Enteritis, acute,	5	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ulcerative ileocolitis, acute,	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genito-urinary system: —																	
Nephritis, chronic,	4	1	3	-	-	-	-	1	-	-	1	-	-	-	-	-	-
Accidental asphyxiation by food,	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suicide by throwing himself under loaded wagon,	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-
Suicide by hanging,	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals,	153	86	67	1	10	11	2	6	8	10	4	14	2	2	-	1	1

[illegible]

THIRD ANNUAL REPORT
OF THE
TRUSTEES
OF THE
BOSTON STATE HOSPITAL,
FOR THE YEAR ENDING NOV. 30, 1911.



BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1912.

THIRD ANNUAL REPORT

OF THE

TRUSTEES

OF THE

BOSTON STATE HOSPITAL, *Inc*

FOR THE YEAR ENDING NOV. 30, 1911.



Bm
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1912.

JAN 21 1921

STATE HOUSE BOSTON

Mass. Officials.

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MASS. STATE BOARD OF PUBLICATION
TO
THE STATE HOUSE

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TRUSTEES

OF THE

BOSTON STATE HOSPITAL.

WALTER CHANNING, M.D., <i>Chairman</i> ,	Brookline.
HENRY LEFAVOUR, <i>Secretary</i>,	.	.	.	.	Boston.
Mrs. HENRIETTA S. LOWELL,	.	.	.	.	Brookline.
LEHMAN PICKERT,	.	.	.	.	Brookline.
Mrs. KATHERINE G. DEVINE,	.	.	.	.	Boston.
Hon. MELVIN S. NASH,	.	.	.	.	Hanover.
MICHAEL J. JORDAN,	.	.	.	.	Dorchester.

Stated meetings of the trustees are held at the hospital on the second Tuesday of each month.

VISITING COMMITTEES, 1911-12.

February,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
March,	.	.	.	.	Mr. LEFAVOUR and Mr. PICKERT.
April,	.	.	.	.	Mr. JORDAN and Mr. PIPER.
May,	.	.	.	.	Dr. CHANNING and Mr. PICKERT.
June,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
July,	.	.	.	.	Dr. CHANNING and Mr. PIPER.
August,	.	.	.	.	Mr. LEFAVOUR and Mrs. LOWELL.
September,	.	.	.	.	Mr. JORDAN and Mr. PICKERT.
October,	.	.	.	.	Mrs. DEVINE and Mrs. LOWELL.
November,	.	.	.	.	Mr. LEFAVOUR and Mr. NASH.
December,	.	.	.	.	Mr. JORDAN and Mr. PICKERT.
January,	.	.	.	.	Dr. CHANNING and Mrs. DEVINE.

RESIDENT OFFICERS

OF THE

BOSTON STATE HOSPITAL.

HENRY P. FROST, M.D.,	.	.	<i>Superintendent.</i>
SAMUEL W. CRITTENDEN, M.D.,	.	.	<i>Assistant Superintendent.</i>
STEPHEN E. VOSBURGH, M.D.,	.	.	<i>First Assistant Physician.</i>
MARY E. GILL, M.D.,	.	.	<i>Assistant Physician.</i>
ERMY C. NOBLE, M.D.,	.	.	<i>Assistant Physician.</i>
JOHN E. OVERLANDER, M.D.,	.	.	<i>Assistant Physician.</i>
JOHN I. WISEMAN, M.D.,	.	.	<i>Assistant Physician.</i>
MYRTELLE M. CANAVAN, M.D.,	.	.	<i>Pathologist.</i>
JANE ROBERTSON,	.	.	<i>Superintendent of Nurses.</i>
JESSIE M. BUIST,	.	.	<i>Assistant Superintendent of Nurses.</i>
FLORENCE N. SPIDLE,	.	.	<i>Matron.</i>
ARTHUR E. MORSE,	.	.	<i>Chief Engineer.</i>
LOUIS S. WHITE,	.	.	<i>Farmer.</i>

NON-RESIDENT OFFICERS.

WILLIAM E. ELTON,	.	.	<i>Treasurer and Steward.</i>
ARTHUR E. MORSE,	.	.	<i>Chief Engineer.</i>
LOUIS S. WHITE,	.	.	<i>Farmer.</i>

BOARD OF CONSULTING PHYSICIANS.

CHARLES F. WITHINGTON, M.D.,	}	<i>Physicians.</i>
JOHN L. AMES, M.D.,		
JOHN BAPST BLAKE, M.D.,	}	<i>Surgeons.</i>
FRED B. LUND, M.D.,		
JOHN JENKS THOMAS, M.D.,	.	<i>Neurologist.</i>
ROBERT G. LORING, M.D.,	.	<i>Ophthalmologist.</i>
ALFRED M. AMADON, M.D.,	.	<i>Otologist.</i>
HARRIS P. MOSHER, M.D.,	.	<i>Laryngologist.</i>
MALCOLM STORER, M.D.,	.	<i>Gynecologist.</i>
CHARLES J. WHITE, M.D.,	.	<i>Dermatologist.</i>

The Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor and the Honorable Council.

The trustees of the Boston State Hospital have the honor to present herewith their third annual report.

DEVELOPMENT OF THE HOSPITAL.

Each year the State insane hospitals are called on to make additional provision for the increase in the cases of insanity seeking for admission. The State Board of Insanity, knowing the capacity of these institutions, can with some accuracy determine the probable number of cases which circumstances render it desirable to apportion to each. Situated as the Boston State Hospital is, in the metropolitan district, which furnishes a large percentage of the admissions to all the hospitals, and with a psychopathic department for the first care and observation of acute cases, both the trustees and the Board of Insanity are of the opinion that this institution must be looked to, to provide for a constantly increasing number of patients, especially of the more acute and excited type, who should be removed as short a distance as possible from their homes.

In accordance with these views, the trustees, in their report for 1910, asked for a special appropriation for alterations in the buildings at the men's department; a home for male nurses; buildings for patients working on the farm called the "farm group"; a service building, and an addition to the electric light and power plant. The farm group, while badly needed, is omitted from this year's list of requests, other demands being more urgent. As no special appropriation was granted the

hospital last year for these purposes, the trustees would again respectfully submit their reasons for asking for it. In the report referred to, they said: —

In visiting the buildings in the men's department, legislative committees have very justly criticized the large amount of unnecessary space taken up by halls and passageways, and also the cheerlessness of them. Plans have been prepared for throwing some of these halls into the wards and taking down partition walls, in this way giving more light and enough extra space to accommodate about 32 patients. For this purpose the trustees ask for the sum of \$6,000.

At present we have no proper quarters for male nurses, and this lack is one of the reasons why it is hard to retain good men in our employ. With the continually increasing number of patients, our present accommodations, poor as they are, are becoming overcrowded. We therefore ask for an appropriation of \$22,000 to provide a nurses' home for 35 men.

Since this paragraph was written in 1910, the plans have been revised so that the building, as now arranged, will provide for 42 men at the same expense, making a decidedly low per capita cost.

For a service building for the entire institution, including a bakery plant, we ask an appropriation of \$42,000. So far the hospital has had only a few small refrigerators and no storeroom of adequate size. Consequently provisions cannot be kept in quantity, and only a limited stock of general supplies. Within a comparatively short time we shall have a population of upwards of 1,200. The economical administration of an institution caring for so many patients requires a thoroughly equipped service building, including a refrigerating plant.

When the infirmary buildings are completed an addition to the electric light and power plant will be needed. We ask \$13,875 for this purpose.

This year the amount needed will be \$16,000. The difference is explained by the fact that last year the cost of outside wiring to connect the infirmary buildings, if lighted from the present direct current plant, amounting to \$2,125, was deducted, this being the sum allowed in the contract for the infirmary buildings. As no special appropriation was granted in 1911 and the connections have been made with the infirmary buildings, the cost remains as first estimated. The reasons why this

addition is necessary are the following: It is desirable to install two electric current generators in the engine room at the women's department which will enable us to do away with the electric light and power plant at the men's department, effecting economy in operation. It would be a mistake to put in any more direct current generators, as an alternating plant will distribute current much more economically to the scattered groups of buildings.

In addition to this appropriation, we would ask for an appropriation of \$115,000 for a building for disturbed women and \$34,500 for farm buildings. A real exigency exists for the erection of a building for disturbed women. The superintendent makes this clear in his report. In addition to what he has to say, we would add from our own observation, that many harmless patients, who need quiet surroundings are excited, made unhappy, and in some cases seriously injured, by the presence of a class of noisy, disturbed and violent patients who should not be treated in the same building with them. The number of this class is, and has been, unusually large, and probably will be, as the hospital of necessity must expect, from its ready accessibility to Boston, to receive the most disturbed class of patients. Success of treatment largely depends on a proper classification, which at present is impossible. If we can have a building for disturbed women, a much improved classification will result, and we shall approach still nearer the standard of care, which as a matter of humanity and medical treatment, we feel it our duty to provide. The farm buildings were old when the city acquired the property, and are now dilapidated and not worth repairing. They stand on sites needed for ward buildings; are inconveniently placed for administration, and are much too small for present needs. Their proximity to the hospital buildings is unpleasant and unsanitary. If we are to continue to produce our own milk, as is desirable, both for economy and health, a sanitary dairy barn is an absolute necessity and one that cannot be safely ignored. The estimated cost is \$34,500.

Summary of Appropriations for 1912.

Maintenance,	\$310,000
For the main hospital,	\$270,000
For the psychopathic department,	40,000
Building for disturbed women,	115,000
Alterations, buildings men's department,	6,000
Nurses' home,	22,000
Service building,	42,000
Farm buildings,	34,500
Addition to electric light and power plant,	16,000
Extension of sewage and water systems to proposed new buildings,	3,000

The Legislature of 1909-10 granted an appropriation for the erection of an infirmary group for 300 patients, an addition to the Butler building for the treatment of acute cases and a laundry and industrial building. The infirmary group will be ready for occupancy in the spring of 1912. The hospital contains a large and steadily increasing number of infirm and bedridden patients, and pressure on the wards will be relieved by placing these patients together under one roof. The laundry and industrial building was occupied during the summer. It is bright and attractive, and for the first time the hospital has adequate facilities for furnishing employment to the women. Further details concerning the new buildings will be found in the report of the superintendent.

PSYCHOPATHIC HOSPITAL.

The construction of the building has gone on steadily, though somewhat delayed by various minor difficulties. These have, however, been successfully surmounted, and it is expected that patients will be received in the early summer of 1912. The external appearance of the building is attractive and makes it an ornament to the neighborhood. The internal arrangements, while not yet tested by experience, appear to be well adapted to their purpose. It must be remembered that this building is unique in character, being a general hospital for the mentally sick who, as far as possible, are to be treated like patients in an ordinary city hospital. To accomplish this purpose it is nec-

essary to provide not only the facilities usually found in such an institution, but many added ones demanded by the special character of the disease. Thus we find no large wards, but small ones, as well as many single rooms, allowing for the utmost diversity of classification and treatment. Physicians' and head nurses' offices are either in the wards or close to them. There is an admission department, as well as one for out-patients and social service; examining rooms and laboratories, where careful tests, both mental and physical, can be made; a hydrotherapy plant, continuous bath rooms, solariums, roof gardens, and so on.

Special attention should also be called to the fact that while the patients are being treated as if they were in an ordinary hospital, they are suffering from an illness which makes them irresponsible and they therefore must be carefully watched and protected from possible harm to themselves or others. To carry out the treatment which must be active, thorough-going and vigilant, if the best results are to be attained, there must be a large corps of physicians and nurses on constant duty.

The expense of maintaining general hospitals like the Massachusetts General, and the City Hospital, is large, and the same will be true of the psychopathic hospital, and in considering the per capita cost, comparison should be made with those institutions and not with a State insane hospital. In the psychopathic hospital a large percentage of incipient and mild cases will be received. Many of these will be arrested or cured within a short period.

The out-patient and social service department will treat patients at the hospital and in their homes, often making admission to the hospital unnecessary. This department will also investigate the histories of patients in their homes, and endeavor to find out what may have been the causes of the attacks either in the patients or their environment, thereby gaining information which may throw light on prevention. Students will have the advantage of studying mental disease in the wards as they do other diseases and when they go into practice will be prepared to recognize this disease in the earliest stages when preventive treatment is still possible.

As a result of the work which the psychopathic hospital will

inaugurate, mental disease will be better understood, and outside the hospital, as well as within its walls, an increasing percentage of cases will be prevented or cured. The resulting economic saving to the State should far outweigh the high cost of maintenance, when it is remembered that each case of incurable insanity cared for in a State hospital means an expenditure of several thousand dollars.

ADMINISTRATION.

There has been marked improvement in this direction during the past year. All departments are co-operating and working together as a harmonious whole under the guiding hand of the superintendent.

It is a source of satisfaction to go through the institution and find the wards, dining rooms and kitchens neat and well looked after. The whole staff of employees take great interest in the patients and perform their difficult duties willingly, cheerfully and loyally. The patients respond and in increasing numbers do their best work for the general welfare. Progress toward better things is everywhere apparent.

The superintendent has given careful attention to the improvement of the medical and general management of the hospital, and has also supervised the construction of the new buildings, including the psychopathic hospital. He has shown himself equal to all demands imposed on him, and the steady progress made is in large measure due to his efforts.

REPAIRS AND IMPROVEMENTS.

Much has been accomplished toward bettering the condition of both buildings and grounds. Every male patient who could be gotten out of doors has been given such work as he has been able to do, and the combined efforts of all have been of great assistance. The State has benefited, and still more the patients themselves, who, if not cured, have in many instances gained in both mental and physical condition.

The details of work accomplished under this heading will be found in the report of the superintendent.

AFTER CARE AND SOCIAL SERVICE DEPARTMENT.

The trustees desire to call attention to what the superintendent says on this subject in his report and heartily approve the following statement: "Recognizing the possibilities of more thorough, lasting and far-reaching benefit to the patients and the community by thus extending the hospital's functions and taking an active part in the campaign for the prevention of insanity, I believe the time has come for the establishment of an after care and social service department as an integral part of the hospital organization." Extended study will be necessary to determine the best means of accomplishing this object, but we believe it to be of great importance.

DEATH OF A MEMBER OF THE BOARD.

On July 26, 1911, the Board sustained a severe loss in the death of William Taggard Piper. At the August meeting of the Board, the following resolution was unanimously adopted: —

The trustees of the Boston State Hospital desire to express their profound sense of loss in the death of their honored associate, Mr. William Taggard Piper. During the whole period of his connection with the Board, Mr. Piper has been of unvarying devotion to its interests. He brought with him a keen appreciation of the responsibilities of such a trust and a very varied and valuable experience derived from his connection with other institutions, and this experience he placed generously at the disposal of the hospital and gave unstintingly of his time and thought. He belonged to the rare type of loyal and useful public servants who contribute so unselfishly to the welfare of the Commonwealth.

APPOINTMENT TO THE BOARD.

In September, Hon. Melvin S. Nash, of Hanover, was appointed by the Governor to fill the unexpired part of the term of Mr. Piper, ending on the first Wednesday in February, 1918, and he assumed the duties of the position at the meeting of the Board on October 10.

APPOINTMENT OF A MEDICAL CONSULTING STAFF.

At the November meeting of the Board it was unanimously voted to ask the following gentlemen to serve as a consulting staff:—

Chas. F. Withington, M.D.,	.	.	.	.	.	}	<i>Physicians.</i>
John L. Ames, M.D.,	.	.	.	.	.
John Bapst Blake, M.D.,	.	.	.	.	.	}	<i>Surgeons.</i>
Fred B. Lund, M.D.,	.	.	.	.	.
J. J. Thomas, M.D.,	.	.	.	.	.	.	<i>Neurologist.</i>
Robert G. Loring, M.D.,	.	.	.	.	.	.	<i>Ophthalmologist.</i>
Alfred M. Amadon, M.D.,	.	.	.	.	.	.	<i>Otologist.</i>
Harris P. Mosher, M.D.,	.	.	.	.	.	.	<i>Laryngologist.</i>
Malcolm Storer, M.D.,	.	.	.	.	.	.	<i>Gynecologist.</i>
Charles J. White, M.D.,	.	.	.	.	.	.	<i>Dermatologist.</i>

The trustees anticipate great help from the advice and co-operation of these gentlemen, in solving difficult medical problems, and regard the hospital as fortunate in having secured their services.

Full details of hospital operations for the current year will be found in the appended reports of the superintendent and treasurer.

Respectfully submitted,

WALTER CHANNING.
HENRY LEFAVOUR.
HENRIETTA LOWELL.
KATHERINE G. DEVINE.
MICHAEL J. JORDAN.
LEHMAN PICKERT.
MELVIN S. NASH.

SUPERINTENDENT'S REPORT.

To the Trustees of the Boston State Hospital.

I have the privilege and duty of submitting herewith the third annual report of the hospital, for the year ending Nov. 30, 1911, together with the statistics prescribed by the State Board of Insanity, which are for the year ending September 30.

There were 861 patients in the hospital at the beginning of the statistical year; the admissions numbered 762, the dismissals 614, deaths 140, leaving 869 at the close of the year.

The daily average number of patients was 853.48, of whom 732.45 were State charges, 43.27 reimbursing, and 77.76 private; 1,545 different patients were in the hospital during the year.

There were 24 emergency, 25 voluntary, and 342 temporary care cases admitted.

Exclusive of temporary care cases, transfers and returns from visit, 433 patients were received, of whom 380 were admitted for the first time, 32 for the second time, and 21 for the third to sixth time.

The cases never before committed to any hospital for the insane numbered 357. Concerning these the following facts are noted: 175, or 49 per cent., were foreign born, and 264, or 74 per cent., were of foreign parentage on one or both sides. The average age on admission was 44.97 years; 21 per cent. were sixty years of age or more.

The chief causes of insanity (excluding 119 cases, in which it was not ascertained) were: Excessive use of alcohol in 24 per cent.; senility in 20 per cent.; syphilis in 16 per cent.; worry in 10 per cent.; arteriosclerosis in 8 per cent.

There were among the first admissions 45 cases of general paralysis, 12.6 per cent. of the whole number admitted. Seventeen of the 45 paretics were women, which is an unusually high ratio, though not so high as in our admissions of the previous year.

The discharges, exclusive of transfers, and not including the temporary care cases, which are separately considered, numbered 161. Of these, 66 were recovered, and 63 improved, — 15 of them classed as “capable of self support.” The recoveries were 15.2 per cent. of the number committed, which is an improvement over last year’s record, though by no means a figure to afford satisfaction. It is a fact, however, that 34 per cent. of the admissions were hopeless cases by reason of congenital defect, advanced age, or organic brain disease, to say nothing of those recognized as suffering from psychoses usually found to be incurable.

There were 145 deaths, 5 of which occurred among patients in “temporary care.” Excluding these and figuring on the committed cases only, as heretofore, the deaths were 10.7 per cent. of the whole number under treatment, 16.4 per cent. of the daily average number of patients, and 32 per cent. of the commitments. The cause of death was general paralysis in 31 cases, other diseases of the nervous system in 11, pneumonia in 36, tuberculosis in 6. One was a suicide.

In conformity with a practice which is rapidly extending, and in order that our report may be more readily comparable with those issued by the leading hospitals of this country, we have this year classified our cases under the Kraepelin diagnostic headings as modified by Prof. Adolf Meyer.

The psychopathic wards in the Butler building received from Oct. 1, 1910, to Sept. 30, 1911, 342 patients, 205 men and 137 women. One hundred and six were committed to this hospital, 139 committed or returned to other hospitals, and 101 were discharged without commitment, 52 of them as recovered. The daily average number of temporary care cases was: Men, 4.82; women, 3.67; total, 8.49. More detailed statistics of this special service will be found in Table 1a of this report.

The variety of disorders which came under care, and the extent to which the opportunity to secure prompt relief in emergency situations was taken advantage of, augur well for the success of the permanent psychopathic wards soon to be opened in a more central and accessible location, where, with plenty of room for classification, and the best of equipment for treatment, results may be anticipated of which those here reported are but the promise.

We have not had to contend this year with any unusual sickness among patients or employees, and have been relatively free from such diseases as tuberculosis, dysentery, and diarrhoeal disorders. Segregation of the tubercular and their treatment in the open air during the mild season, together with the maximum of outdoor life for the whole population and scrupulous care in the handling of garbage, and the exclusion of flies, are measures which have no doubt contributed to this result. An effort, more or less successful, was made to curtail the breeding of flies, by screening and prompt removal of manure from the stables, and cleaning up other breeding places; and in general the sanitary condition of the premises has been improved by the substitution of granolithic pavement for cobblestones in the kitchen yard, laying drains, filling low marshy spots, etc.

The only serious mishap I have to report is the occurrence of a suicide. The patient, a young man who had been in the hospital several months, and who was in a moody, depressed state, was suspected of having some harmful weapon in his possession, and while in the act of being searched by the attendants, succeeded in slashing his throat with a kitchen knife which he had secreted, dying in a few moments.

Nineteen male patients eloped, all of whom, with one exception, were returned to the hospital or else accounted for at home and allowed to remain there. That more do not leave without permission speaks well for the parole and open-door system which is practiced here on a large scale, more than 20 per cent. of the men being given parole on the grounds. Of 30 who slept in tents all summer with no special supervision, not one absconded.

CHANGES IN THE MEDICAL STAFF

during the year were as follows:—

Dr. John E. Overlander was appointed assistant physician July 1.

Dr. Harry M. Nicholson, assistant physician, resigned October 1 to accept appointment in the Massachusetts Eye and Ear Infirmary.

Dr. John I. Wiseman was appointed assistant physician October 1.

Dr. Overlander had served two years in the Channing Sanitarium, and Dr. Wiseman a corresponding period in the Kings Park State Hospital in New York, so they both entered upon their duties here with unusually good preparation, and are, from the start, valuable assistants.

Dr. Howard A. Lane, who was engaged last year as dentist for the patients, resigned, to our regret, owing to other appointments. This position is now acceptably filled by Dr. Walter J. Whelan of Mattapan, who visits the hospital once a week and devotes a forenoon to this service.

THE LABORATORY,

opened late in the preceding year, has had installed the additional apparatus required, and is now well equipped for work in bacteriology, clinical pathology and pathological anatomy. Autopsies were performed on 50 cases during the year, this number being 35.71 per cent. of the deaths occurring in the hospital. Examinations of blood, cerebrospinal fluid, sputum, urine and faeces were made in many cases; bacteriological examination of the milk was begun, and comparative tests of commercial disinfectants made in order to determine their relative efficiency and cost. Close co-operation between the laboratory and the clinical staff is maintained through the medium of staff meetings, of which one each month is held in the laboratory and devoted to demonstration and discussion of material by the pathologist.

I have pleasure in calling your attention to the appended report by Dr. Canavan, showing in some detail what has been accomplished in her department and what is planned for the immediate future.

NURSES' TRAINING SCHOOL.

Twelve pupils comprising the class of 1911 received their diplomas on the evening of June 8, on which occasion appropriate exercises were held in the entertainment hall, concluding with a reception and dance. The address to the graduates was delivered by President Lefavour of Simmons College, and the diplomas were presented by Dr. Channing, chairman of the board of trustees.

The report of the superintendent of nurses shows full classes, a large excess of applications, and few resignations among the pupils, all of which are evidences that the school is thriving. Several of the male attendants are participating in the course and are expected to be among the graduates next year. The special course of instruction for the men who do not consent to join the school has been continued with good results.

FIELD WORKER AND SOCIAL SERVICE.

We were fortunate in securing, October 1, the services of Miss Ruth W. Lawton, a trained field worker from the Eugenics record office conducted by Dr. Charles B. Davenport at Cold Spring Harbor, Long Island. The special object of this assignment, which is at the expense of the record office except for maintenance and incidentals, is the study of heredity in insanity, but in securing data on this subject in the homes of patients and among their relatives and friends, the field worker is able to serve the hospital, the patient and the family in many practical ways. Information is obtained concerning the family, their resources, the home conditions, — the setting in which the patient's disorder occurred, — and concerning the patient's personality, tastes, aptitudes, habits, the stresses to which he was exposed, etc., — the soil on which the psychosis developed and its exciting causes, — all of which are important aids to the physicians in forming their judgment of the nature and needs of the case. Then, when it is a question of the patient's discharge, such a survey of the situation in which he is placed, and a supervision by visits during the trial period, will constitute the most effective sort of after care.

Recognizing the possibilities of more thorough, lasting and far-reaching benefit to the patients and to the community by thus extending the hospital's function and taking an active part in the campaign for the prevention of insanity, I believe the time has come for the establishment of an after care and social service department as an integral part of the hospital organization. It should command the interest and attention of all the medical officers, but should be under the special charge of a physician, who, with the necessary experience and knowledge, combined with certain essential qualifications, in-

cluding conviction and enthusiasm, might devote himself (or herself) to this most interesting and fruitful field. The results would have to be meager indeed not to amply repay to the State the added cost of the service.

EMPLOYMENT OF PATIENTS.

The industrial rooms for both men and women have expanded into larger quarters, and a number of new industries have been introduced, which furnish agreeable and beneficial occupation for the patients of various classes, and supply many of the hospital necessities at a very low cost of production. The men make and renovate mattresses and pillows; manufacture brooms, brushes, mats, and rugs; cane chairs, do upholstering, fit window shades, repair shoes and renovate old furniture. The women sew, do fancy work, make raffia and reed baskets and mats, straw hats, and rugs, repair, mark and press clothing, etc. The attendants and nurses are detailed to assist in these work rooms, and are given instruction to fit them for teaching and encouraging their patients in the wards to relieve and stimulate their minds by means of useful occupation. Experience has shown here and elsewhere that with but few exceptions even the dullest can be aroused to take an interest in something if only enough pains be taken by those in charge, and that the benefit to the individual is not less marked than the saving to the hospital in lessening of untidiness and destructive tendencies. Thirty-three men and 90 women patients are in attendance daily in the industrial rooms.

Outdoor work, however, for those able to participate in it, is held to be of even greater value than shop employment in promoting bodily and mental health; and there is an unlimited amount of work to be done on the grounds and in the farm and garden; consequently, the number of outdoor workers among the men is larger than the shop list. The daily average number so engaged, excluding the winter months, was 65.

The percentage of patients employed at all kinds of work, including that done in the wards, is for the men 60 per cent., and for the women 65 per cent. Aged and infirm patients, the bedridden and the violent, will account for practically all of the remainder.

ENTERTAINMENT OF PATIENTS.

Due attention has been paid to diversions, with the understanding that these have a therapeutic value of real importance in many cases, besides being a recognized factor in all social life and a privilege of which no one, not a criminal, ought to be deprived if in a condition to feel appreciation. It is pleasing, and at the same time pathetic, to see how hearty is the average patient's enjoyment of even very simple entertainments, and to observe their cheering influence, anticipatory and retrospective, in the wards. The following were provided during the year: —

Dance every second Monday evening from October to May.

Dec. 9, S. di Grazia — Eccentric musical program.

13, Mme. Helen Stuart-Richings — Recitations and impersonations.

Feb. 6, Edward Brigham — Songs and recitations.

13, S. Thompson Blood — Impersonations.

Mar. 27, J. B. Giguere — Songs and banjo playing.

Apr. 5, Mrs. Olive W. Hilton — Vocal and instrumental concert.

July 4, Band concert, watermelon, lemonade and peanuts.

Oct. 13, W. E. Baker — Sleight of hand performance, women's department.

28, Hospital Music Association — Concert, afternoon and evening.

Nov. 4, W. E. Baker — Sleight of hand performance, men's department.

14, Mrs. Olive W. Hilton — Vocal and instrumental concert.

27, Avelier L. French — Bird, animal and sound imitations.

Thirty-three men and 38 women patients attended a circus performance in the city on May 31 and June 1, respectively. August 17, there was a picnic for 45 women patients at Blue Hills Reservation.

Special dinner with table and ward decorations on Thanksgiving and Christmas, and on the evening of the latter, Christmas trees, with distribution of presents and program of music.

In addition to the above there have been ward musicales and card parties, physical culture exercises, and for selected patients basket ball and other games in the gymnasium.

REPAIRS AND IMPROVEMENTS.

The larger items under this head were: painting Walker, Stedman, Butler and "A" buildings outside, and all of these except the last inside as well, from top to bottom; erecting 6 outside iron fire escapes, on Wards "E" and "C" and the employees' quarters at the women's department, and the south wing of the men's group; installing new telephone exchange with 56 stations, connecting all departments of the hospital; putting new roofs on cow stable and one wing of the horse and carriage stable at the women's department; making rather extensive repairs to the piggery; rebuilding a number of outside wooden platforms and steps; moving and rebuilding a summer house; making ironing boards, racks, tables, and other fittings for the new laundry and building laundry dry room; laying 237 yards of granolithic pavement and walks; laying 222 feet of 6-inch iron pipe for new water supply to Stedman and Walker buildings; laying sewers, grading and roadmaking around the new buildings; planting 140 trees; clearing, draining and putting under cultivation 9 acres of swamp land. The engineer's force, in addition to their regular work, laid out and installed shafting and pulleys for power transmission in the new laundry, erected and made connections to 3 motors for same, and made up and installed all the electric fixtures for this building. The engineer also superintended the overhauling and moving of laundry machinery from the old to the new building.

NEW BUILDINGS.

The new laundry was completed and occupied during the summer. Three new washing machines, an extractor and a tumbler dryer were installed, but the rest of the equipment is the old machinery moved from the former quarters, much of it antiquated and of little efficiency. An additional mangle is badly needed, also body and shirt ironers, a collar shaper and various pieces of minor apparatus to enable us to handle satisfactorily the large additional amount of work to be done in this department when the infirmary and psychopathic hospital shall be occupied within the coming year. The upper floor

of this building is a large, sunny, well-ventilated room, admirably suited for the purpose to which it is applied — an industrial room for women patients.

The addition to the Butler building was occupied in October and completes very satisfactory provision for recent excited cases of both sexes, and also for the temporary care patients. The addition consists of an extension to each of the two Butler wards, in which are a dormitory, a semi-private section of three communicating rooms, a sitting room, and a large bathroom equipped with shower and tubs for prolonged baths. The basement contains hydrotherapeutic and massage treatment rooms. In these wards a complete separation is possible between those patients who are excitable and noisy, and others who, removed from disturbing association with them, are calmer but yet too unstable to be transferred to other wards, and who require the special treatment for which this section is equipped. The new quarters are attractive and cheerful, and already the benefits to be expected from this important addition to our facilities for treating the most difficult cases are being experienced.

The infirmary group is nearing completion and will be ready to receive patients, we hope, in January. The construction is first class and the arrangement, as now seen in the nearly completed building, seems excellently suited for the care and treatment of our large quota of infirm and helpless, for which class it will provide quarters for 150 of each sex, including a special hospital ward for men and one for women.

THE PSYCHOPATHIC HOSPITAL.

In addition to the erection, heating, lighting and plumbing contracts entered into last spring, and on which satisfactory progress has been made, the trustees have provided for a refrigerating plant, elevators and hydrotherapeutic apparatus, on all of which work is under way. It is hoped that nothing will occur to prevent the building being ready for service about the first of June.

SPECIAL APPROPRIATIONS NEEDED.

The trustees will doubtless repeat their requests made last year for additional buildings to provide for anticipated growth of the hospital and the consequent increase in service facilities necessitated by the larger number to be cared for. To these items there should, I think, be added a building for the disturbed and violent women patients, who at present occupy a building altogether unsuitable for their care and treatment, and located inappropriately for that purpose, contiguous to the wards for quiet cases, to the sleeping quarters of officers and nurses, and to the main hospital entrance and driveway. They have no privacy, but are stared at by loiterers whom their noise attracts, and are further excited by such attention. The unavoidable sounds from these wards are the subject of numerous vigorous complaints from people living in the vicinity of the hospital.

MAINTENANCE EXPENSES.

The amount expended for maintenance was \$223,581.92, which, divided by the daily average number of patients, 858.12, makes the weekly per capita cost \$4.995. Receipts for board of private patients were \$19,750.66; from reimbursing patients, \$7,410.81; from sales and other sources \$1,463.73, making the total income \$28,625.20.

Deducting receipts from gross expenses, the net cost of maintenance was \$194,956.72, which, divided by the above average number of patients, gives a net weekly per capita cost of \$4.357.

The expense of maintenance for the coming year is estimated at \$270,000 for the main hospital and \$40,000 for the psychopathic hospital, or \$310,000 altogether. This sum will provide for the considerable increase in population which will result from opening the new infirmary group early in the year, and will maintain the psychopathic hospital for six months, from June to December.

VISITORS.

The hospital was officially visited and inspected by His Excellency Governor Foss, Lieutenant-Governor Frothingham, and the Executive Council, with the secretaries to the Governor

and the Council; by the legislative committee on Public Charitable Institutions; Messrs. Harpham and Coe, experts for the Governor; the chairman, executive officer and members of the State Board of Insanity and their assistants and agents. Visits were received from many persons connected with similar institutions or interested in them, among whom were: Prof. Adolf Meyer of Johns Hopkins University; Dr. William L. Russell, superintendent of Bloomingdale Hospital; Dr. Robert B. Lamb, formerly superintendent of Matteawan State Hospital; Dr. Charles H. North, superintendent of Dannemora State Hospital; Dr. Donald L. Ross, superintendent of the Connecticut State Hospital for Epileptics; Dr. Walter E. Fernald, superintendent of the Massachusetts School for Feeble-minded; Dr. George L. Wallace, superintendent of the similar institution at Wrentham; Dr. Arthur V. Goss, superintendent of Taunton State Hospital; Dr. Charles T. LaMoure, superintendent of Gardner State Colony; Dr. Frederick L. Hills, superintendent of the Eastern Maine Insane Hospital; Dr. George H. Torney of the Utica State Hospital; Dr. F. S. Meyer and M. Witlam, of Amsterdam, Holland, etc.

The Assistant Physicians' Association held a meeting here which was attended by members of the staff from most of the Massachusetts hospitals for the insane; and the hospital stewards also had one of their meetings at the hospital. The classes from Harvard, Tufts and Boston University Medical schools were received for clinics, also Dr. Cabot's summer class (post-graduate).

ACKNOWLEDGMENTS.

Thanks are returned for donations of magazines and illustrated papers by the Hospital News Society, the Boston Public Library, Dr. Walter Channing, and Dr. Owen Copp; to Mrs. Guy Lowell for two framed engravings for the wards, and to Dr. Dixwell and members of the Hospital Music Association for their annual concert, which is always enjoyed. Father James J. McCafferty was, during the year, succeeded as Catholic chaplain by Father Edward Gallagher, to both of whom and to Rev. Charles S. Otto, we are grateful for faithful and comforting services to patients.

For me the year has been full of work, but free of worry, thanks to the cordial assistance of my fellow-workers — officers and employees — to whom is due and gratefully rendered most of the credit for such improvement in the hospital plant and its service as you have been pleased to note and commend. With renewed thanks to the trustees for their unfailing support and too generous treatment,

Respectfully submitted,

HENRY P. FROST,

Superintendent.

Nov. 30, 1911.

REPORT OF THE PATHOLOGIST.

To the Superintendent of the Boston State Hospital.

The following is a report from the laboratory for the period from Oct. 7, 1910, to Sept. 30, 1911.

Although pathological work has been done for this hospital since 1881 by Drs. W. W. Gannett, W. T. Councilman, F. B. Mallory, J. J. Thomas, E. E. Southard, E. W. Taylor, and R. M. Pearce, no resident pathologist had ever been appointed, and the necessary clinical pathology was done by the assistant physicians. Press of work due to enlargement of the hospital, more admissions, greater demands on the staff, need for meeting and advancing the standard of other hospitals which maintain laboratories, made the necessity for a definite pathological department obvious, and accordingly plans were maturing for its establishment in the minds of Drs. Copp and Frost, and the appointment of the writer in June, 1910, became a fact in October, when the

ORGANIZATION OF THE LABORATORY

became the first consideration. Before the laboratory apparatus was assembled, a problem in hygiene in the form of an epidemic of paratyphoid fever among the employees presented itself (description of which is to be published), and the unavoidable delay of equipment proved a serious obstacle for assistance in diagnosis. For a time much work of interest was turned over to the city board of health, and the attention of the writer centered on clinical pathology, antityphoid inoculations and collection of epidemiological data.

By December 1 a skillful and thoroughly trained technician — Miss Ellen R. Scott — was installed, from the Harvard Medical School, to whom is entrusted the details of cutting and staining the tissues, making stains and solutions, preparing media, assisting with inoculation of animals, with records and preparation of specimens, and taking protocol notes.

The regular work began in earnest in February with a modest equipment of microtomes, glassware, chemicals, sterilizers, incubators, centrifuges, weights and balances, for bacteriology, pathology, clinical pathology and histology, proportionate to the needs of the hospital.

Since fan ventilation, gas and new instruments have been provided for the autopsy room, it is hoped that the walls will be repaired, and that a larger table with central drainage and overhead water supply can be obtained.

AUTOPSIES.

Through the courtesy and persistence of the members of the staff, permission has been secured for autopsies in 34+ per cent. of the deaths, and from Oct. 7, 1910, to Sept. 30, 1911, 50 post mortems have been performed. Protocols are made directly, typewritten, and a duplicate filed with the case, the originals being kept in the laboratory and bound into volumes. Protocols of the autopsies of the 190 cases in the preceding nineteen years are being assembled for binding.

TEACHING OF NURSES.

Advantage of the demonstration of anatomy and the gross pathology has been taken by the superintendent of nurses, who has sent members of the training school to be in this way instructed, and the staff have been in almost constant attendance during the performance of autopsies to correlate findings with their ante mortem diagnoses.

Gross specimens, 35 in number, have been collected and preserved in Kaiserling's fluid. It is purposed to secure suitable jars for displaying these specimens, which then will be available for demonstration. Sections for histological examination have been preserved from each autopsy. The spinal cords are prepared by the Marchi and Weigert methods in each case, while trunk organs are examined by the nuclear and connective tissue stains of Mallory. Brains which show tumors, arteriosclerotic or other gross lesions have been sectioned *in toto*, and are being prepared for demonstration of the degenerations in nuclei and tracts. Temporal bones from a series of 25 or 30

cases have been decalcified and handed over to Dr. A. M. Amadon of the Harvard Medical School for intensive histological study of the organ of Corti.

Permission was received from the hospital for afternoons during August, that the writer might receive instruction in general pathology under Prof. W. T. Councilman at the Harvard Medical School, and much of profit learned there will be included in the second course of lectures and demonstrations to the nurses in pathology, bacteriology and urinary analysis during this winter, and in the autopsy interpretations at the laboratory staff meetings, of which there have been 6 in the period covered by this report, and in which 25 autopsied cases have been reviewed.

CLINICAL PATHOLOGY.

Since the establishment of the laboratory, it has been ready to examine and report on specimens which might arise from the medical services, and the following is a list of work done from Oct. 7, 1910, to Sept. 30, 1911:—

Pleuric fluids,	1
Surgical specimens,	3
Pus,	7
Blood cultures,	8
Bacteriological examination of stools,	10
Bacteriological examination of urine,	10
Vaccines,	10
Widals,	21
Cerebrospinal fluids,	34
Throat cultures,	60
Blood counting,	121
Urines,	407
<hr/>	
Total,	692

BACTERIOLOGY.

From each autopsy cultures are taken from the heart's blood and cerebrospinal fluid, and from glands, bladder or other foci when suspicion pointed to them, for completion of the observation of the cases. Examinations of the throat for exclusion of the Klebs-Loeffler bacillus, stools from patients suffering from

enteritis, pus from urethral and vaginal discharge, meat to determine effect of storage, urine from patients recovering from acute illness or suffering from cystitis were made, results from which are valuable to the physician in charge, and of interest to the laboratory. Many animal inoculations have been made to determine the presence of tubercle bacilli, and an inoculation to determine virulence of Klebs-Loeffler bacillus found in sputum was done.

It is proposed to continue and extend the laboratory work as described in the foregoing pages, and to investigate the bacteriological content of meat and milk from time to time during the coming months, and to complete several pieces of individual work for publication.

In conclusion I wish to thank the officers who have made this report possible, for their interest and help, and you, who have given me generous encouragement.

Respectfully submitted,

MYRTELLE M. CANAVAN,
Pathologist.

SEPT. 30, 1911.

SUPERINTENDENT OF NURSES' REPORT.

To the Superintendent of the Boston State Hospital.

The twelfth annual report of the Training School for Nurses is herewith respectfully submitted:—

Graduating Class of 1911.

Edna L. Proctor.	Henrietta L. Schaffner.
Annie L. Proctor.	Sarah A. Goodwin.
Helen J. Raymond.	Maidie E. Tilley.
Grace H. Tracey.	Margaret A. MacLeod.
Sarah A. Macdonnell.	May M. Wood.
Marion E. Stavers.	Annie B. Backman.

Nursing Staff.

Superintendent of nurses,	1
Assistant superintendent of nurses (graduate),	1
Supervisors, day (graduates),	3
Supervisor, night (graduate),	1
Head nurses (graduates),	9
Head nurses (pupils),	8
Night nurses (pupils),	10
Night attendants,	5
Day nurses (pupils),	22
Day attendants,	20
Probationer,	1
Total,	81
Applications during the year,	324
Applications accepted during the year,	68
Probationers,	40
Attendants,	25
Former graduates of this school,	3
Left during the year:—	
Graduates,	3
Pupils,	9
Attendants,	28
Probationers (one became telephone operator),	22
Probationers rejected,	5

The training school has graduated 12 nurses during the year, making a total of 80 nurses since it was organized.

Two of our graduates have resigned during the year and have entered a general hospital to take a postgraduate course. One of our former graduates returned and remained with us a few months in charge of the industrial room. Two other post-graduates also returned, and are still with us in charge of wards.

The school opened this year with an attendance of 48 pupils, which is shown as follows: —

Undergraduates,	.	.	.	.	:	.	.	.	.	.	.	8
Seniors (including 2 men),	.	.	.	.	.	.	.	.	.	.	.	21
Juniors (including 1 man),	.	.	.	.	.	.	.	.	.	.	.	14
Probationers,	.	.	.	.	.	.	.	.	.	.	.	5

Instruction is given by the physicians of the hospital staff, the superintendent of nurses, and the assistant superintendent of nurses, covering courses in anatomy, physiology, hygiene, bacteriology, histology, pathology, chemistry, hydrotherapy, emergencies, physiology and diseases of the skin, lungs and kidneys, urinalysis, surgery and anæsthesia, diseases of bones, fractures and dislocations, immunity and serum therapy, vaccines, materia medica, gynecology, obstetrics, tuberculosis, symptomatology, acute infectious diseases, anatomy and physiology of the nervous system, psychiatry, massage, cooking, housekeeping and clinical instruction.

Respectfully submitted,

JANE ROBERTSON,
Superintendent of Nurses.

VALUATION.

Nov. 30, 1911.

Buildings and 152 acres land taken from the city of Boston Dec. 1, 1908, . . .	\$1,000,000 00	
79 acres land taken Nov. 3, 1909, assessed for	62,710 00	
Amount paid on new buildings and addi- tions:—		
Infirmary,	184,698 16	
Laundry,	42,553 61	
Butler,	36,288 35	
Psychopathic hospital (land and building),	386,560 46	
		\$1,712,810 58
Provisions and groceries,	\$3,831 66	
Clothing and clothing materials,	8,816 14	
Furnishings,	50,889 29	
Heat, light and power,	1,567 18	
Repairs and improvements:—		
Machinery and mechanical fixtures,	22,869 00	
All other property,	3,030 32	
Farm, stable and grounds:—		
Live stock on farm,	8,316 40	
Produce of farm on hand,	5,229 30	
Carriages and agricultural implements,	4,377 50	
All other property,	4,129 55	
Miscellaneous,	3,429 11	
		116,482 45
		<u>\$1,829,293 03</u>

TREASURER'S REPORT.

To the Trustees of the Boston State Hospital.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1911:—

CASH ACCOUNT.

Balance Dec. 1, 1910,	\$3,908 48
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Receipts.

Institution Receipts.

Board of inmates:—

Private,	\$19,750 66
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Reimbursements, insane,	7,410 81
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\$27,161 47

Sales: —

Food,	\$387 16
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Clothing and materials,	38 08
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Furnishings,	.	.	.	40	68
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Heat, light and power,	23 18
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Repairs and improvements, .	3 20
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Miscellaneous,	5 03
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Farm, stable and grounds:—

Cows and calves,	.	.	135 08
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Pigs and hogs,	475 01
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Sundries,	66	00
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1,172 42

Miscellaneous receipts: —

Interest on bank balances,	\$290 31
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Rent,	16 00
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306 31

28,641 20

Receipts from Treasury of Commonwealth.

Maintenance appropriations: —

Balance of 1910,	\$7,204 25.
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Advance money (amount on hand November 30),	15,000 00
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Approved schedules of 1911,	\$203,013 92
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Less returned,	.	.	22	02
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202,991 90

225,196 15

Special appropriations,	534,575 93
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Total,	\$792,321 76
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Payments.

To treasury of Commonwealth, institution receipts,		\$28,641 20
Maintenance appropriations: —		
Balance November schedule, 1910,	\$11,112 73	
Eleven months' schedules, 1911,	202,991 90	
November advances,	9,438 10	
	<hr/>	223,542 73
Special appropriations: —		
Approved schedules,		534,575 93
Balance Nov. 30, 1911: —		
In bank,	\$5,223 17	
In office,	338 73	
	<hr/>	5,561 90
Total,		<hr/> \$792,321 76

MAINTENANCE.

Appropriation,	\$223,600 00
Expenses (as analyzed below),	223,581 92
	<hr/>
Balance reverting to treasury of Commonwealth,	\$18 08

Analysis of Expenses.

Salaries, wages and labor: —		
General administration,	\$31,554 07	
Medical service,	12,037 10	
Ward service (male),	17,671 92	
Ward service (female),	26,157 09	
Repairs and improvements,	7,486 25	
Farm, stable and grounds,	9,725 16	
	<hr/>	\$104,631 59
Food: —		
Butter,	\$5,341 02	
Butterine,	2,090 07	
Beans,	814 65	
Bread and crackers,	186 90	
Cereals, rice, meal, etc.,	970 15	
Cheese,	1,002 08	
Eggs,	4,059 22	
Flour,	6,061 17	
Fish,	2,226 42	
Fruit (dried and fresh),	2,101 92	
Meats,	14,217 46	
Milk,	5 35	
Molasses and syrup,	189 24	
Sugar,	2,326 20	
Tea, coffee, broma and cocoa,	2,287 36	
Vegetables,	681 85	
Sundries,	2,497 80	
	<hr/>	47,058 86
Amount carried forward,		<hr/> \$151,690 45

Amount brought forward, \$151,690 45

Clothing and materials: —

Boots, shoes and rubbers,	\$1,617 60
Clothing,	3,160 85
Dry goods for clothing and small wares,	1,178 29
Furnishing goods,	161 15
Hats and caps,	63 33
Leather and shoe findings,	59 79

6,240 91

Furnishings: —

Beds, bedding, table linen, etc.,	\$6,000 55
Brushes, brooms,	452 79
Carpets, rugs, etc.,	673 64
Crockery, glassware, cutlery, etc.,	1,104 04
Furniture and upholstery,	1,081 45
Kitchen furnishings,	792 08
Wooden ware, buckets, pails, etc.,	74 69
Sundries,	1,752 81

11,932 05

Heat, light and power: —

Coal,	\$15,337 84
Gas,	20 00
Oil,	26 89
Sundries,	563 83

15,948 56

Repairs and improvements: —

Cement, lime and plaster,	\$226 85
Doors, sashes, etc.,	119 07
Electrical work and supplies,	498 15
Hardware,	784 93
Lumber,	1,159 33
Machinery, etc.,	1,464 09
Paints, oil, glass, etc.,	1,872 97
Plumbing, steam fitting and supplies,	1,862 28
Roofing and materials,	308 20
Sundries,	3,188 68

11,484 55

Farm, stable and grounds: —

Blacksmith and supplies,	\$672 08
Carriages, wagons, etc., and repairs,	1,059 80
Fertilizers, vines, seeds, etc.,	734 29
Hay, grain, etc.,	4,531 58
Harnesses and repairs,	205 12
Cows,	1,600 50
Other live stock,	183 45
Tools, farm machines, etc.,	575 94
Sundries,	1,252 27

10,815 03

Amount carried forward, \$208,111 55

Amount brought forward,

\$208,111 55

Miscellaneous:—

Books, periodicals, etc.,	\$298 83
Chapel services and entertainments,	1,719 93
Freight, expressage and transportation,	99 72
Funeral expenses,	31 45
Gratuities,	237 45
Hose, etc.,	75 95
Medicines and hospital supplies,	2,704 56
Medical attendance, nurses, etc. (extra),	925 18
Manual training supplies,	213 60
Postage,	397 30
Printing and printing supplies,	552 11
Printing annual report,	193 58
Return of runaways,	44 05
Soap and laundry supplies,	1,029 94
Stationery and office supplies,	607 57
School books and school supplies,	3 83
Travel and expenses (officials),	187 15
Telephone and telegraph,	592 17
Tobacco,	257 16
Water,	4,692 65
Sundries,	606 19
	<hr/>
	15,470 37
	<hr/>
Total expenses for maintenance,	\$223,581 92

SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1910,	\$842,475 35
Appropriations for fiscal year,	250,000 00
	<hr/>
Total,	\$1,092,475 35
Expended during the year (see statement annexed),	539,951 06
	<hr/>
Balance Nov. 30, 1911,	\$552,524 29

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$5,561 90
November cash vouchers (paid from advance money),	9,438 10
Due from treasury of Commonwealth account	
November, 1911, schedule,	5,590 02
	<hr/>
	\$20,590 02

Liabilities.

Schedule of November bills,	\$20,590 02
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PER CAPITA.

During the year the average number of inmates has been 858.12.
Total cost for maintenance, \$223,581.92.
Equal to a weekly per capita cost of \$4.995.
Receipts from sales, \$1,173.42.
Equal to a per capita of \$0.026.
All other institution receipts \$27,467.78.
Equal to a per capita of \$0.614.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
For the purpose of establishing in the city of Boston a hospital for the first care and observation of mental patients and the treatment of acute and curable mental diseases,	Acts 1909, chap. 470,	\$600,000 00	\$296,113 94	\$386,560 46	\$213,439 54
Butler building addition,	Acts 1910, chap. 644,	39,000 00	32,076 62	36,288 35	2,711 65
Infirmery,	Acts 1910, chap. 644,	275,000 00	169,971 18	184,698 16	90,301 84
Laundry,	Acts 1910, chap. 644,	44,000 00	36,414 19	42,553 61	1,446 39
Land (paid through State Board of Insanity), {	Res. 1911, chap. 65,	250,000 00	5,375 13	5,375 13	244,624 87
	Acts 1911, chap. 513,				
		\$1,208,000 00	\$539,951 06	\$755,475 71	\$552,524 29

Respectfully submitted,

WILLIAM E. ELTON,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL.

Assistant Supervisor of Accounts.

PRODUCTS OF THE FARM AND GARDEN.

GARDEN PRODUCTS.

Asparagus, 4 boxes,	\$14 00
Beans, shell, 16 bushels,	28 35
Beans, string, 72½ bushels,	58 00
Beets, 345 bushels,	207 00
Beets, 100 bunches,	5 00
Beet greens, 152 bushels,	53 70
Cabbage, 4 tons,	100 00
Carrots, 15 bushels,	11 25
Cauliflower, 13¾ boxes,	17 00
Celery, 67 boxes,	60 30
Corn, green, 1,126 bushels,	1,126 00
Cucumbers, 30½ boxes,	22 80
Dandelions, 74½ bushels,	30 75
Egg plant, 1¼ barrels,	3 75
Kale, 39 bushels,	11 70
Lettuce, 231 boxes,	115 50
Onions, 71 bushels,	78 10
Parsley, 8 bushels,	4 00
Peas, 70 bushels,	140 00
Pepper grass, 25 bunches,	50
Peppers, 5 bushels,	3 75
Potatoes, 1,280 bushels,	1,152 00
Pumpkins, 1,000 pounds,	30 00
Radishes, 421 dozen,	126 30
Rhubarb, 9,000 pounds,	180 00
Spinach, 25 bushels,	10 00
Squash, winter, 182¾ barrels,	182 75
Squash, summer, 15¾ barrels,	15 75
Tomatoes, ripe, 88¾ bushels,	66 56
Tomatoes, green, 51 bushels,	25 50
Turnips, white, 64 barrels,	70 40
Turnips, ruta-baga, 130 barrels,	143 00
Apples, 72½ barrels,	181 25
Currants, 156 boxes,	17 16
Pears, 45 bushels,	45 00
Plums, 136 boxes,	40 80

Raspberries, 40 boxes,	\$6 00
Strawberries, 2,554 boxes,	306 48
Blackberries, 310 boxes,	43 40
Grapes, 180 pounds,	7 20
<hr/>	
Total,	\$4,741 00

FARM PRODUCTS.

Ensilage, 200 tons,	\$800 00
Fodder, green, cabbage, 12 tons,	60 00
Fodder, green, corn, 5 tons,	25 00
Fodder, green, clover and alfalfa, 199 tons,	1,194 00
Fodder, green, millet, 47½ tons,	237 50
Fodder, green, oats, barley and peas, 43 tons,	215 00
Fodder, green, rye, 20 tons,	100 00
Hay, English, 130 tons,	2,730 00
Hay, meadow, 12 tons,	252 00
Rye, straw, 4 tons,	96 00
Beef, 5,344 pounds,	320 64
Milk, 184,018⅝ quarts,	11,841 11
Pork, 25,733 pounds,	2,315 97
Ice, 850 tons,	2,550 00
Sale of condemned cows, hides, calves and tallow,	135 08
Sundries,	66 00
<hr/>	
Total,	\$22,938 30
Garden products,	\$4,741 00
Farm products,	22,938 30
<hr/>	
Total,	\$27,679 30

REPORT OF WORK DONE IN THE MEN'S INDUSTRIAL ROOMS

FOR THE YEAR ENDING NOV. 30, 1911.

<i>Articles manufactured.</i>			
Brooms, corn,	325	Chairs caned, various styles, . . .	120
Brooms, rattan,	9	Chairs scraped and varnished, . . .	92
Brooms, whisk,	18	Chairs upholstered,	9
Brushes, floor polishing, Tampico,	36	Commodore,	9
Brushes, horse, corn,	12	Cushions,	5
Brushes, long handled scrub, Tampico,	34	Floor brushes, handles put in, . . .	18
Brushes, radiator, Tampico,	2	Floor polishers,	22
Brushes, stove, Tampico,	22	Floor polishers refilled, bristles, . . .	5
Cushions, leatherette,	18	Hair, new picked (pounds),	4,800
Mats, coir braid,	28	Hair, old, sterilized and picked (pounds),	10,600
Mats, coir yarn,	16	Hand bag, leather,	1
Mat loom, complete,	1	Lounge,	1
Mattresses, single, hair,	250	Massage table top upholstered, . . .	1
Pillows, hair,	60	Mattresses, double, hair,	6
Rugs, hooked,	9	Mattresses, single, hair,	520
Window shades, made and fitted,	120	Mop handles,	19
		Pillows, hair,	450
		Settees caned,	2
		Settee, new top,	1
		Shades,	80
		Shoes, men's (pairs),	403
		Slippers, men's (pairs),	82
		Tables,	57
		Tents,	4
		Tent flies,	4
		Wardrobes,	13
<i>Articles renovated.</i>			
Automobile seats and back,	1		
Boots, men's (pairs),	60		
Bureaus,	28		
Carpets,	4		
Carriage seats,	4		
Carriage shields,	4		
Chairs,	621		

REPORT OF WORK DONE IN WOMEN'S INDUSTRIAL AND SEWING ROOMS

FOR THE YEAR ENDING NOV. 30, 1911.

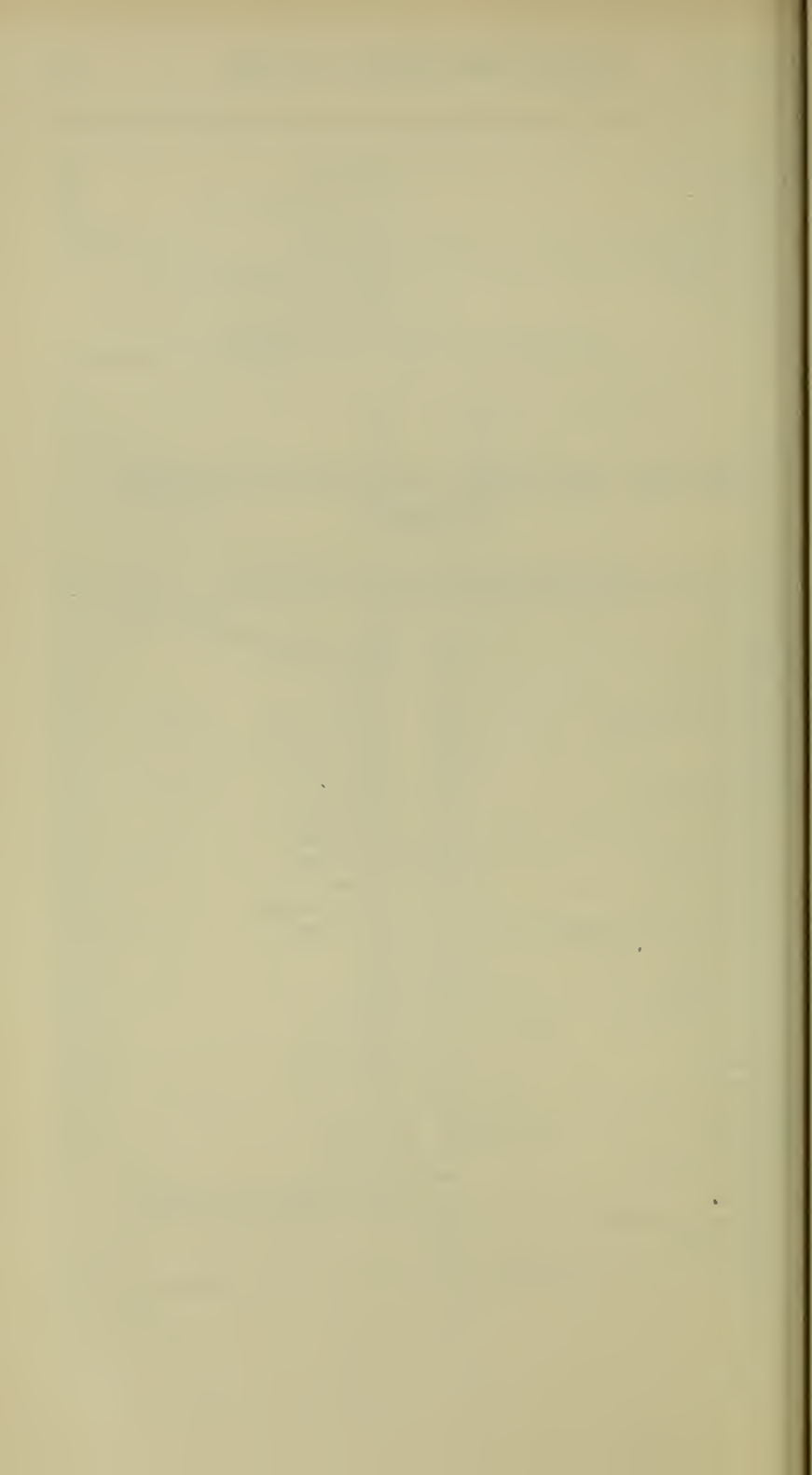
Aprons,	1,939	Hemstitching — <i>Concluded.</i>	
Artificial flowers,	262	Doilies,	3
Bed shirts,	48	Table covers,	173
Bibs,	18	Table napkins,	24
Blanket hemmed,	1	Hot water bag covers,	2
Braided straw baskets,	2	Iron holders,	60
Bread basket covers,	2	Jabots,	6
Bureau covers,	72	Kimonas,	25
Burial sheets,	186	Lace, crocheted (yards),	2
Carpet rags (pounds),	10	Laundry bags,	544
Clay models,	2	Laundry bags strings,	12
Chemises,	240	Mattresses,	350
Corset covers,	6	Nightdresses,	1,030
Doilies,	11	Overalls and jumpers,	54
Doilies, crocheted,	4	Pad covered,	1
Doilies, Mexican work,	2	Pajamas,	12
Drawers,	384	Petticoats,	372
Drawn work, pieces,	6	Pillows,	300
Dresses,	447	Pillow slips,	2,520
Dresses overcast,	33	Punctured brass frame,	1
Dress waist,	1	Raffia work: —	
Embroidery: —		Bags,	2
Aprons,	4	Baskets,	7
Baby bibs,	3	Jardinieres,	26
Baby pillows,	3	Napkin rings,	4
Belts,	35	Slippers,	10
Centerpieces,	13	Table mats,	4
Collars,	12	Wastebaskets,	3
Corset cover,	1	Workbaskets,	1
Doilies,	29	Reed work: —	
Handkerchiefs,	4	Baskets,	4
Hat,	1	Tea table,	1
Jabots,	8	Wastebaskets,	5
Jewel bags,	3	Workbasket,	1
Napkin rings,	7	Rugs,	3
Pin cushions,	5	Rugs, braided,	2
Pin cushion tops,	3	Rugs hemmed and put in frames,	2
Sachet bags,	4	Rugs, hooked,	4
Towels,	14	Sanitary napkins,	302
Face cloths, crocheted,	6	Screen covers,	30
Hemstitching: —		Shades,	18
Bureau covers,	110	Sheets,	2,870
Commode covers,	12	Shirts,	144

Sofa pillows,	6	Suspenders,	130
Spread hemmed,	1	Tablecloths,	55
Stencilling: —		Table and stand covers,	152
Bureau scarf,	1	Table napkins,	96
Pillow cover,	1	Towels,	5,605
Sofa pillows,	8	Wastebaskets, fancy braid,	2
Table cover,	1	Mending.	
Straw hats,	10	Making bandages and nurses' caps.	

REPORT OF WORK DONE ON WOMEN'S WARDS

FOR THE YEAR ENDING NOV. 30, 1911.

Aprons,	1,550	Raffia work — <i>Concluded.</i>	
Bibs,	90	Picture frame,	1
Bureau covers,	65	Pin trays,	2
Buttonholes,	40	Rowboat,	1
Carpet rags (pounds),	93	Sandals (pairs),	3
Dresses,	18	Table covers,	3
Dust cloths,	12	Wastebaskets,	2
Hemstitching: —		Workbag,	1
Bureau covers,	56	Workbaskets,	6
Doilies,	4	Rugs, braided,	5
Stand covers,	144	Rugs, hooked,	3
Table covers,	10	Rugs, rag,	2
Towels,	12	Sanitary napkins,	598
Windows curtains (pairs),	14	Screen covers,	21
Iron holders,	133	Sheets,	3,554
Jabots, crocheted edge,	12	Shirts,	19
Laundry bags,	24	Spreads,	36
Laundry bag strings,	24	Suspenders,	202
Nightgowns,	41	Tablecloths,	28
Nightshirts,	6	Table covers,	283
Petticoats,	132	Table napkins,	496
Pillows made over,	22	Towels,	2,143
Pillow slips,	2,241	Undershirts,	36
Raffia work: —		Wrappers,	18
Baskets, small,	6	Picking hair.	
Canoe,	1	Making bandages and sponges.	
Curtain loops (pairs),	48	Marking clothing, etc.	
Jardinieres,	5		



STATISTICAL TABLES.

[FORM PRESCRIBED BY STATE BOARD OF INSANITY.]

1. — General Statistics of the Year.

	INSANE.			TEMPORARY CARE.			AGGREGATES.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients in the hospital Sept. 30, 1910.									
Viz.: regularly committed,	376	475	851	8	2	10	384	477	861
emergency,	375	471	846	—	—	—	375	471	846
voluntary,	1	4	5	—	—	—	1	4	5
temporary care,	—	—	—	8	2	10	8	2	10
Admitted within the year,	204	322	526	158	78	236	362	400	762
Viz.: by regular commitment,	158	247	405	—	—	—	158	247	405
emergency,	3	2	5	—	—	—	3	2	5
voluntary,	9	14	23	—	—	—	9	14	23
temporary care,	—	—	—	158	78	236	158	78	236
viz.: observation,	—	—	—	5	7	12	5	7	12
others,	—	—	—	153	71	224	153	71	224
by transfer,	4	1	5	—	—	—	4	1	5
from visit,	2	13	15	—	—	—	2	13	15
from escape,	5	2	7	—	—	—	5	2	7
Nominal admissions for discharge,	23	43	66	—	—	—	23	43	66
Viz.: from visit,	23	43	66	—	—	—	23	43	66
from escape,	—	—	—	—	—	—	—	—	—
Whole number of cases within the year,	580	797	1,377	166	80	246	746	877	1,623
Dismissed within the year,	229	285	514	162	78	240	391	363	754
Viz.: discharged,	56	105	161	160	75	235	216	180	396
as recovered,	31	35	66	38	14	52	69	49	118
as capable of self-support,	10	5	15	—	—	—	10	5	15
as improved,	7	41	48	7	5	12	14	46	60
as not improved,	8	21	29	109	45	154	117	66	183
as not insane,	—	3	3	6	11	17	6	14	20
died,	—	—	—	2	3	5	54	91	145
transferred,	52	88	140	—	—	—	68	28	96
escaped,	68	28	96	—	—	—	5	5	10
on visit October 1,	5	—	5	—	—	—	—	—	—
Nominal dismissals for commitment,	48	64	112	—	—	—	48	64	112

1. — General Statistics of the Year — Concluded.

	INSANE.			TEMPORARY CARE.			AGGREGATES.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients remaining Sept. 30, 1911,									
Viz.: regularly committed,	351	512	863	4	2	6	355	514	869
emergency,	348	505	853	—	—	—	348	505	853
voluntary,	3	7	10	—	—	—	3	7	10
temporary care,	—	—	—	4	2	6	4	2	6
supported as State patients,	314	418	732	4	2	6	318	420	738
as reimbursing patients,	11	34	45	—	—	—	11	34	45
as private patients,	26	60	86	—	—	—	26	60	86
Number of different persons within the year,	555	749	1,304	162	79	241	717	828	1,545
Number of different persons admitted,	181	278	459	155	77	232	336	355	691
Number of different persons admitted from the community,	170	262	432	155	77	232	325	339	664
Number of different persons dismissed,	206	241	447	159	66	225	365	317	682
Number of different persons dismissed to the community,	138	213	351	160	75	235	298	288	586
Number of different persons recovered	31	35	66	38	14	52	69	49	118
Number of different persons capable of self-support,	10	5	15	—	—	—	10	5	15
Daily average number of patients,	354.42	490.57	844.99	4.82	3.67	8.49	359.24	494.24	853.48
Viz.: State patients,	314.49	409.47	723.96	4.82	3.67	8.49	319.31	413.14	732.45
reimbursing patients, . . .	15.09	28.18	43.27	—	—	—	15.09	22.18	37.27
private patients,	24.84	52.92	77.76	—	—	—	24.84	52.92	77.76
Whole number of emergency admissions,	—	—	—	—	—	—	10	14	24
Whole number of voluntary admissions,	—	—	—	—	—	—	9	16	25
Daily average number of voluntary patients,	—	—	—	—	—	—	2.05	6.20	8.25
Whole number of temporary care admissions,	—	—	—	—	—	—	205	137	342

1a. — Temporary Care Statistics for the Year.

	Males.	Females.	Totals.
Patients remaining Oct. 1, 1910,	8	2	10
Admissions from Oct. 1, 1910, to Oct. 1, 1911,	205	137	342
Viz.: chapter 504, Acts of 1909, section 34,	4	1	5
chapter 504, Acts of 1909, section 43,	5	7	12
chapter 504, Acts of 1909, section 44,	11	15	26
chapter 307, Acts of 1910,	169	92	261
chapter 395, Acts of 1911,	16	22	38
Whole number of cases within the year,	213	139	352
Discharges from Oct. 1, 1910, to Oct. 1, 1911,	209	137	346
Viz.: recovered,	38	14	52
improved,	7	5	12
unimproved,	10	4	14
died,	2	3	5
not insane,	6	11	17
deported,	1	—	1
committed to Boston State Hospital,	47	59	106
committed to Danvers State Hospital,	37	8	45
committed to Worcester State Hospital,	27	17	44
committed to Westborough State Hospital,	19	12	31
committed to Taunton State Hospital,	3	2	5
committed to Monson State Hospital,	2	—	2
committed to McLean Hospital,	1	—	1
committed to Dr. Mellus' Sanitarium,	1	—	1
returned to Bridgewater State Farm,	1	—	1
returned to Medfield State Asylum,	1	—	1
returned to Worcester State Hospital,	—	1	1
returned to Westborough State Hospital,	2	—	2
returned to Monson State Hospital,	1	1	2
returned to Worcester State Asylum,	1	—	1
returned to Danvers State Hospital,	2	—	2
Patients remaining Oct. 1, 1911,	4	2	6
Daily average of temporary care cases,	4.82	3.67	8.49

Provisional Diagnosis in Temporary Care Cases.

	Males.	Females.	Totals.
Alcoholic psychoses: —			
Pathological intoxication,	6	1	7
Delirium tremens,	17	8	25
Polyneuritic psychoses,	2	1	3
Acute hallucinosis,	25	12	37
Chronic delusional,	4	2	6
Chronic alcoholism,	2	2	4
Drug and toxic psychosis: —			
Morphinism,	1	—	1
Dementia præcox,	29	22	51
Allied to dementia præcox,	1	2	3
Paranoic conditions,	17	12	29
Manic-depressive psychoses: —			
Excitement,	23	19	42
Depression,	10	8	18
Involution melancholia,	3	8	11
Senile psychoses,	8	6	14
General paresis,	23	5	28
Epileptic psychoses,	6	—	6
Epilepsy and alcoholism,	2	1	3
Epilepsy,	6	1	7
Imbecility,	—	1	1
Constitutional inferiority,	3	2	5
Psychasthenia,	1	—	1
Hysteria,	1	1	2
Hysterical amnesia,	1	1	2
Depression undifferentiated,	1	2	3
Delirium with heart disease,	1	1	2
Arteriosclerotic brain disease,	1	1	2
Central neuritis,	—	1	1
Apoplexy,	2	1	3
Acute delirium,	—	1	1
Not insane,	6	10	16
Unclassified,	3	5	8
Totals,	205	137	342

2. — *Insane received on First and Subsequent Commitments.*

NUMBER OF COMMITMENT.	CASES COMMITTED.		
	Males.	Females.	Totals.
First to this hospital,	161	219	380
Second to this hospital,	7	25	32
Third to this hospital,	1	12	13
Fourth to this hospital,	—	3	3
Fifth to this hospital,	1	1	2
Sixth to this hospital,	—	3	3
Total cases,	170	263	433
Total persons,	170	262	432
Never before in any hospital for insane, *	150	207	357

3. — *Nativity and Parentage of Insane Persons first admitted to Any Hospital.*

PLACE OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.	Patients.	Fathers.	Mothers.
Massachusetts,	66	16	17	72	23	20	138	39	37
Other New England States,	11	15	15	15	12	16	26	27	31
Other States,	6	8	10	11	6	6	17	14	16
Total native,	83	39	42	98	41	42	181	80	84
Other countries:—									
Canada,	12	10	11	18	16	17	30	26	28
Cuba,	—	—	—	—	1	—	—	1	—
England,	6	9	5	5	7	7	11	16	12
France,	—	1	—	1	1	1	1	2	1
Germany,	4	8	6	5	11	12	9	19	18
Ireland,	31	61	64	62	97	96	93	158	160
Italy,	3	3	3	3	6	6	6	9	9
Newfoundland,	—	—	—	3	3	3	3	3	3
Norway,	—	—	—	1	1	1	1	1	1
Roumania,	—	1	—	—	—	—	—	—	—
Russia,	7	9	10	5	6	6	12	15	16
Scotland,	2	2	2	—	3	2	2	5	4
South America,	—	—	—	1	1	1	1	1	1
Sweden,	1	2	1	4	4	4	5	6	5
Wales,	—	1	2	—	—	—	—	1	2
Total foreign,	66	107	104	108	157	156	174	264	260
Total native,	83	39	42	98	41	42	181	80	84
Unknown,	1	4	4	1	9	9	2	13	13
Totals,	150	150	150	207	207	207	357	357	357

4. — *Residence of Insane Persons admitted from the Community.*

	FIRST ADMITTED TO ANY HOSPITAL.			OTHER ADMISSIONS.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Massachusetts: —									
Suffolk County,	149	202	351	20	55	75	169	257	426
Middlesex County,	—	3	3	—	—	—	—	3	3
Unknown,	1	—	1	—	—	—	1	—	1
Total resident,	150	205	355	20	55	75	170	260	430
New York,	—	1	—	—	—	—	—	1	—
Connecticut,	—	1	—	—	—	—	—	1	—
Total nonresident,	—	2	—	—	—	—	—	2	—
Cities or towns, 10,000 or over,	150	207	357	20	55	75	170	262	432
Totals,	150	207	357	20	55	75	170	262	432

5. — *Civil Condition of Insane Persons first admitted to Any Hospital.*

	Males.	Females.	Totals.
Unmarried,	65	80	145
Married,	69	77	146
Widowed,	16	44	60
Divorced,	—	6	6
Totals,	150	207	357

6. — Occupation of Insane Persons first admitted to Any Hospital.

MALES.

Actor,	1	Nurse,	1
Artist,	1	Painters,	6
Barbers,	2	Paper cutter,	1
Bartender,	1	Peddlers,	3
Boiler maker,	1	Piano maker,	1
Carpenters,	2	Plumber,	1
Car starter,	1	Roofer,	1
Chauffeur,	1	Salesmen,	7
Clerks,	6	Shoemakers,	2
Druggist,	1	Steam fitters,	2
Engineers,	3	Student,	1
Footman,	1	Steward,	1
Foremen,	2	Surveyor,	1
Grocers,	2	Tailor,	1
Insurance agents,	2	Teachers,	2
Janitors,	3	Teamsters,	13
Laborers,	24	Telegraph operator,	1
Machinists,	5	Tinsmith,	1
Meat cutter,	1	Waiter,	1
Metal polishers,	2	Watch repairer,	1
Motorman,	1		
Newsboy,	1		150
None,	38		

FEMALES.

Boarding house keeper,	1	None,	62
Book binder,	1	Nurses,	2
Bookkeeper,	1	Saleslady,	1
Carpet designer,	1	Scrubwoman,	1
Clerks,	4	Seamstresses,	2
Cooks,	5	Shoemakers,	2
Domestics,	20	Stenographers,	3
Dressmakers,	3	Teacher, school,	1
Housework,	90	Washerwoman,	1
Laundresses,	5		
Music teacher,	1		207

8. — *Probable Cause of Mental Disease in Persons first admitted to Any Hospital.*

EXCITING CAUSES.	ADMITTED.			PREDISPOSING CAUSES.										
	Males.	Females.	Totals.	HEREDITARY TENDENCY.			NEUROTIC TENDENCY.			INTEMPERANCE.				
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.		
Acute infectious diseases,	-	3	3	-	-	-	-	1	-	-	1	-	1	56
Alcohol,	39	17	56	-	-	-	-	-	1	39	17	-	-	2
Apoplexy,	2	-	2	-	-	-	-	-	-	2	-	-	-	-
Arteriosclerosis,	9	11	20	-	-	-	-	1	-	-	-	-	-	-
Cerebral tumor,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Childbirth,	-	2	2	1	-	1	-	-	-	-	-	-	-	-
Congenital,	3	1	4	2	-	2	-	-	-	-	-	-	-	-
Congenital,	-	1	1	-	-	-	-	1	-	-	-	-	-	-
Desertion,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Diabetes,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Drug habit (morphinism),	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Epilepsy,	1	4	5	-	1	1	-	-	-	-	1	-	-	1
Fright,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Ill health,	3	1	3	-	-	-	-	-	-	-	-	-	-	-
Infection and nephritis,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Injury,	3	2	5	-	-	-	-	-	-	-	-	-	-	-
Menopause,	-	12	12	-	3	3	-	-	-	2	-	-	-	2
Nephritis,	-	1	1	-	-	-	-	-	-	-	1	-	-	1
Organic heart disease,	-	2	2	-	-	-	-	-	-	-	-	-	-	-
Overwork,	4	-	4	1	-	1	-	-	-	-	-	-	-	-
Perforating gastric ulcer,	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Rheumatism and endocarditis,	-	27	27	-	-	-	-	-	-	-	-	-	-	-
Senility,	20	12	32	-	1	1	-	-	-	4	1	-	-	5
Syphilis,	26	12	38	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis,	-	2	2	-	-	-	-	-	-	-	1	-	-	-
Worry,	12	12	24	-	-	-	-	-	-	-	-	-	-	-
Totals,	122	116	238	3	6	9	-	1	3	4	22	48	-	70
Unknown,	28	91	119	6	20	26	-	2	16	18	-	-	-	-
Totals,	150	207	357	9	26	35	-	3	19	22	48	22	-	70

9. — *Probable Duration of Mental Disease before Admission.*

PREVIOUS DURATION.	FIRST ADMITTED TO ANY HOSPITAL.		
	Males.	Females.	Totals.
Congenital,	3	6	9
Less than 1 month,	27	26	53
From 1 to 3 months,	26	40	66
3 to 6 months,	24	18	42
6 to 12 months,	20	16	36
1 to 2 years,	21	32	53
2 to 5 years,	14	38	52
5 to 10 years,	3	16	19
10 to 20 years,	4	6	10
Totals,	142	198	340
Unknown,	8	9	17
Totals,	150	207	357
Average known duration (in years), . . .	1.7	1.54	1.62

10. — *Form of Mental Disease in Patients admitted from the Community or discharged, with their Condition on Discharge, or died.*

FORM OF DISEASE.	COMMITTED.			DISCHARGED.										DIED.			AGGREGATES.		
	Males.		Totals.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			NOT INSANE.			Totals.
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	
A. — First admitted to any hospital: —																			
Psychosis with brain tumor,	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Traumatic psychoses,	29	56	85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85
Senile psychoses,	28	17	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	45
General paralysis,	6	11	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
Psychoses with other brain or nervous diseases,	31	13	44	17	4	21	4	—	—	1	—	—	—	—	—	—	—	—	21
Alcoholic psychoses,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Morbinism,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Infective-exhaustive and autotoxic psychoses,	5	10	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
Involution melancholia,	3	16	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
Depressions undifferentiated,	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Dementia præcox,	21	31	52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52
Allied to dementia præcox,	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Paranoic conditions,	2	22	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24
Manic-depressive psychoses,	10	32	42	10	14	24	—	—	—	2	8	10	1	3	4	—	—	—	34
Allied to manic-depressive psychoses,	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Epileptic psychoses,	1	4	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Hysterical psychosis,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Constitutional psychopathic state,	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Constitutional inferiority,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Imbecility,	3	3	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Unclassified,	2	13	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
Not insane,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	150	207	357	27	25	52	5	2	7	6	25	31	7	17	24	—	3	3	239

10. — *Form of Mental Disease in Patients admitted from the Community or discharged, with their Condition on Discharge, or died*
— Concluded.

FORM OF DISEASE.	COMMITTED.			DISCHARGED.												DIED.			AGGREGATES.							
	Males.	Females.	Totals.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			NOT INSANE.			Totals.	Males.	Females.					
				Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.											
B. — Other admissions: —	2	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	—	3	4	2	
Senile psychoses,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	—	1	2	1
General paralysis,	2	4	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Psychoses with other brain or nervous diseases,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Alcoholic psychoses,	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Morbinism,	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Involution melancholia,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Depressions undifferentiated,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dementia praecox,	1	17	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Paranoic conditions,	7	28	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Manic-depressive psychoses,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Allied to manic-depressive psychoses,	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Epileptic psychoses,	2	2	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hysterical psychoses,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Constitutional inferiority,	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Imbecility,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unclassified,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Totals,	20	56	76	4	10	14	5	3	8	1	16	17	1	4	5	6	15	21	17	48	65					
Aggregate cases,	170	263	433	31	35	66	10	5	15	7	41	48	8	21	29	52	88	140	108	193	301					
Aggregate persons,	170	262	432	31	35	66	10	5	15	7	41	48	8	21	29	52	88	140	108	193	301					

11. — *Discharges of the Insane classified by Admission and Result.*

NUMBER OF THE ADMISSION.	RECOVERED.			CAPABLE OF SELF-SUPPORT.			IMPROVED.			NOT IMPROVED.			NOT INSANE.			DIED.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
First,	29	26	55	6	27	33	8	19	27	—	3	3	51	77	128	100	155	255			
Second,	2	4	6	1	10	10	—	1	1	—	—	—	—	8	8	3	25	28			
Third,	—	—	—	1	2	2	—	—	—	—	—	—	—	1	1	1	3	4			
Fourth,	—	2	2	1	—	1	—	—	—	—	—	—	—	1	1	2	3	5			
Fifth,	—	3	3	—	2	2	—	1	1	—	—	—	—	1	1	—	7	7			
Sixth,	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	2	—	2			
Totals,	31	35	66	10	41	48	8	21	29	—	3	3	52	88	140	108	193	301			
First admissions to any hospital,	27	25	52	5	25	31	7	17	24	—	3	3	46	73	119	91	145	236			

12. — Cause of Death and Form of Mental Disease in Persons who died.

CAUSES.	AGGRE- GATES.			CEREBRAL TUMOR.			SENILE PSYCHOSES.			DEMENTIA PARALYTICA.			CENTRAL NEURITIS.			CEREBRAL ARTERIO- SCLEROSIS.			ACUTE ALCO- HOLIC HAL- UCINOSIS.			DRUG PSYCHOSIS.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
General diseases: —																								
Carcinoma of breast and enteritis,	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Carcinoma of breast and tumor of dura,	—	1	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes mellitus with broncho-pneumonia,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas facialis,	—	2	2	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Septicæmia decubitus,	—	4	4	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Septic cellulitis of face and neck,	—	1	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nervous system: —																								
Central neuritis,	—	1	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—
Cerebral tumor,	—	1	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exhaustion of manic-depressive insanity,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exhaustion of chronic mental disease,	5	—	5	—	—	—	4	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dementia paralytica,	14	17	31	—	—	—	—	—	—	14	17	31	—	—	—	—	—	—	—	—	—	—	—	—
Status epilepticus,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tumor of pituitary body and broncho-pneumonia,	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
Circulatory system: —																								
Aortic thrombosis,	—	1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Arteriosclerosis,	10	3	13	—	—	—	10	1	11	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—

[illegible]

[illegible]

13. — Duration of Mental Disease and its Treatment in Persons who recovered or died.

PERIOD.	FIRST ADMITTED TO ANY HOSPITAL.						ALL OTHER ADMISSIONS.					
	DURATION BEFORE ADMISSION.			HOSPITAL RESIDENCE.			WHOLE DURATION.			WHOLE KNOWN PERIOD OF MENTAL DISEASE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
A. — Recovered: —												
Under 1 month, . . .	12	6	18	2	—	2	1	—	1	—	—	—
From 1 to 3 months, . .	6	9	15	13	12	25	9	5	14	1	—	1
3 to 6 months, . . .	6	3	9	3	8	11	5	7	12	—	—	—
6 to 12 months, . . .	2	3	5	3	4	7	4	6	10	2	4	6
1 to 2 years, . . .	1	3	4	6	—	6	7	5	12	—	4	4
2 to 5 years, . . .	—	1	1	—	1	1	1	1	2	—	2	2
Over 5 years, . . .	—	—	—	—	—	—	—	1	1	1	—	—
Totals, . . .	27	25	52	27	25	52	27	25	52	4	10	14
Average of known cases (in months),	2.3	3.96	6.26	6.18	5.85	12.03	8.44	9.81	18.25	24.75	15.70	40.45
										13.	14.63	27.63

B. — Died: —

Congenital,	1	1	2	—	—	—	1	1	2	—	1	1	—	—	—	—	—
Under 1 month,	6	5	11	8	17	25	2	1	3	—	—	—	—	—	—	—	—
From 1 to 3 months,	10	7	17	12	11	23	2	2	5	7	—	—	—	—	1	1	1
3 to 6 months,	5	6	11	4	9	13	5	5	3	8	—	—	—	1	—	1	1
6 to 12 months,	4	9	13	6	15	21	5	5	5	10	—	—	—	1	1	2	2
1 to 2 years,	6	10	16	7	11	18	7	13	20	—	—	1	1	—	1	1	1
2 to 5 years,	7	22	29	6	8	14	13	28	41	2	3	5	1	5	6	6	6
5 to 10 years,	1	5	6	2	2	4	4	9	13	1	2	3	—	1	1	1	1
10 to 20 years,	—	2	2	1	—	1	1	2	3	—	3	3	1	1	2	2	2
Over 20 years,	—	—	—	—	—	—	—	—	—	3	—	3	2	—	2	2	2
Totals,	40	67	107	46	73	119	40	67	107	6	10	16	6	10	16	16	16
Unknown,	6	6	12	—	—	—	6	6	12	—	5	5	—	5	5	5	5
Totals,	46	73	119	46	73	119	46	73	119	6	15	21	6	15	21	21	21
Average of known cases (in months),	14.32	24.79	19.56	17.69	12.14	14.92	42.9	36.93	39.92	295.1	58.96	177.	155.3	32.13	93.72	93.72	93.72

